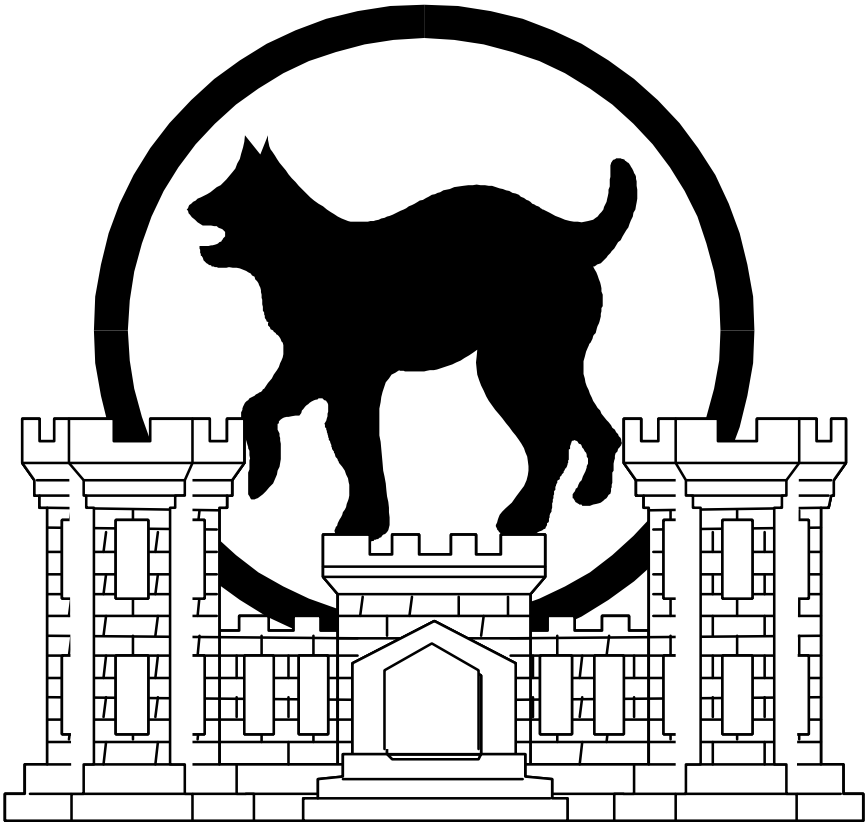
81st Regional Support Command Environmental Handbook



DRAFT

2 December 1998

ENVIRONMENTAL HANDBOOK
Contents (Listed by paragraph number)

Chapter 1
Introduction

1-1. Purpose

a. To establish guidance for the protection and preservation of environmental quality, in keeping with all federal, state, local, and Army Regulations. This Environmental Handbook (ENVIRONMENTAL HANDBOOK) will serve as the implementing guidance for the 81st Regional Support Command (RSC) Environmental Compliance Program. This ENVIRONMENTAL HANDBOOK supports the 81st RSC Environmental Division Mission statement: Achieve full environmental compliance, prevent pollution, restore contaminated sites, provide direction to conserve our limited resources and promote environmental stewardship while accomplishing the Army Reserve's primary mission.

b. Penalties for Non-Compliance. Criminal and Civil fines of up to $25,000 per day can be levied by state and federal jurisdictions for deliberate failure to comply with all federal, state, and local regulations. Criminal activities include willful or negligent dumping of hazardous material, willful contamination of storm water or wastewater, or illegal disposal/transportation of hazardous waste.

1-2. Applicability

a. Department of Defense (DOD) installations, to include RSCs and DOD personnel are required to comply with all federal, state, and DOD regulations designed to protect the environment. Violators can be held personally liable for clean-up costs and civil/criminal penalties.

b. This guidance applies to all units and activities which are assigned or attached to 81st RSC facilities; all units which train at United States Army Reserve (USAR) facilities in the 81st RSC, all direct reporting units which fall under the Base Operations responsibility of the 81st RSC; all 81st RSC units utilizing off-post facilities or other training areas; and all contractor activities performed on 81st RSC USAR facilities.

c. Regional Support Command (RSC) refers to the 81st RSC headquartered in Birmingham, AL, which is responsible for an 8-state region. The states within the region are AL, FL, GA, KY, MS, NC, SC, and TN.

d. Facility Area Support Team (FAST) refers to the Facility Area Support Team for both facility and environmental issues. FAST #1 supports TN, KY, MS, FAST #2 supports NC, SC, and FAST #3 supports FL, GA, AL.

1-3. General

a. Organization. The Environmental Division of the 81st RSC includes positions as identified on the wire diagram located in Appendix A.

b. The following are the basic elements of the 81st RSC Environmental Program:

(1) Plan, initiate, and execute all actions in a manner that will eliminate or minimize any adverse effects to environmental quality without compromising the mission of the 81st RSC.

(2) Each facility will adopt these Environmental Handbook and will attach the following site specific guidance and plans: Spill Prevention, Control, and Countermeasure Plan, Facility Spill Contingency Plan, Pollution Prevention Plan, Storm Water Pollution Prevention Plan, Noise Abatement Plan, and Asbestos Survey/Operation and Maintenance (O&M) Plan. In addition to these plans, State Specific Compliance Guidance will also be included as part of each facility's Environmental Handbook.

(3) The filing and required submission dates of the environmental compliance documents is listed in Appendix B. This is the Modern Army Record Keeping System for 200 series adapted for an Army Reserve facility. Appendix B also lists the required binders that an Army Reserve facility must maintain.

(4) In addition to this Standard Operating Procedure, each facility will maintain, at a minimum, the following environmental regulations:

(a) AR 200-1, Environmental Protection and Enhancement dated 21 February 1997. Add this publication to your DA 12 Series (Form 12-09, block 3190). This regulation provides the foundation for the Army's environmental program.

(b) DA Pamphlet 200-1, Environmental Protection and Enhancement, when published. Add this publication to your DA 12 Series (Form 12-09, block 3190). This pamphlet provides the implementation of the Army's environmental program.

(c) AR 200-2, Environmental Effects of Army Actions, dated 23 December 1988. Add this publication to your DA 12 Series (Form 12-09, block 3191). This regulation provides information on environmental consideration National Environmental Policy Act (NEPA).

(d) Commander's Guide to Environmental Management. Copies of this publication are available from U.S. Army Environmental Center, Aberdeen Proving Ground, MD 21010-5401. Phone (410) 671-1228. This guide provides a practical overview of environmental laws and regulations.

(e) TC 5-400, Unit Leader's Handbook for Environmental Stewardship. Add this publication to your DA 12 Series (Form 12-11, block 5336). This booklet covers the practical environmental requirements of a unit.

(f) DOD 6050.5-L, DOD Hazardous Material Information System. Add this publication to your DA 12 Series (Form 12-04, block 0610). This publication comes as a multiple set of CDs and contains Material Safety Data Sheets (MSDS) for chemicals (hazardous materials) in the National Stock System.

(g) Installation Regulations and Environmental Handbook. If located on an installation, you are required to abide by the installation regulations and Environmental Handbook. Maintain current copies of installation regulations and guidance.

c. Regulatory Inspections

(1) As documented in the Federal Facilities Compliance Act of 1992, federal, state and local regulators have the authority to enter and inspect each Army Reserve Facility in the 81st RSC. They may levy fines and order compliance actions for violations of federal, state or local laws and regulations. In case of a regulatory inspection, remember the following:

(2) Notify the RSC Environmental Division in the case of any visit or official communication from or by a federal, state or local regulator. If possible, coordinate any visits or meetings to include a representative from the 81st RSC Environmental

Division. Complete the Regulatory Inspection Report form and mail the form to the 81st RSC Environmental Division

(3) Negotiation with state regulators is the responsibility of the RSC Headquarters. Facility personnel are not authorized to negotiate with regulators.

d. Acronyms/Abbreviations

(1) Refer to the Glossary.

(2) The 81st RSC is responsible for the 8-state region including AL, FL, GA, KY, MS, NC, SC and TN with the headquarters in Birmingham, AL.

(3) Facility Area Support Team (FAST) refers to the 81st RSC support staff forwardly located to support the 8-state region. This includes both facility and environmental support staff. FAST #1 supports TN, KY, MS, FAST #2 supports NC, SC, and FAST #3 supports FL, GA, AL.

1-4 Roles and Responsibilities

a. Figure 1-1 lists the positions within the 81st RSC that have direct environmental responsibilities.

b. 81st RSC Environmental Quality Control Committee (EQCC)

(1) Responsibilities include: ensuring integration of the command philoEnvironmental Handbookhy on environmental protection and enhancement throughout the 81st RSC.

(2) Refer to Chapter 11, par. 11-2 for more specifics concerning the EQCC's role.

c. 81st RSC Environmental Division Chief / 81st RSC Environmental Division Staff/Facility Area Support Team (FAST) Environmental Managers are responsible for:

(1) The 81st RSC Environmental Program to include all areas of environmental compliance. Development and implementation of the following environmental program areas:

(a) Hazardous Waste Management
(b) Hazardous Material Management
(c) Spill Response / Spill Contingency
(d) Underground Storage Tanks/Aboveground Storage Tanks
(e) Environmental Training
(f) Water Quality (Drinking Water)
(g) Air Quality (Asbestos and Radon)
(h) Pollution Prevention/Recycling
(i) Pesticides
(j) Toxic Substances
(k) Environmental Consideration

(2) Environmental compliance of all facilities. Develops and implements the Environmental Compliance Assessment System for the 81st RSC.

d. Facility Commanders are responsible for:

(1) Appoint, in writing, a Facility Environmental Compliance Officer.

(2) Ensure accountability of all hazardous materials (HM) and hazardous wastes (HW). Dispose of all HW generated at the unit in a proper manner.

(3) Conduct military training and maintenance of vehicles in accordance with all environmental regulations. This responsibility extends to every unit in the facility.

(4) Establish an active environmental management program in compliance with all-pertinent regulations and laws.

(5) Ensure that all personnel exposed to HM in the course of their work are aware of the hazards to which they are exposed and the precautions required to protect themselves.

(6) Ensure that the Facility Manager has received the proper training within 180 days of assuming their duties as well as their annual refresher training. Refer to Chapter 7.

(7) Ensure that when HW coordinators are deployed, there will be a HW manager left behind to manage HW for rear detachments.

e. Facility Manager or Facility Coordinator

(1) Act as the HM/HW spill coordinator (and/or incident on scene coordinator) and ensure that HM/HW spills are immediately contained, reported to the proper authorities, and cleaned up. Take appropriate corrective action to ensure that there will be no repeat occurrence.

(2) Coordinate training for all personnel who come into contact with HM/HW within the normal course of their duties.

(3) Maintain required environmental management records for a minimum of three years.

(a) HM/HW Inventory / HW Generator Report (Monthly)
(b) HW Storage Area-Weekly Inspection Log
(c) Hazardous Waste Manifests / Hazardous Waste Profile Sheets/Turn-in Documents
(d) Regulatory Inspection Reports
(e) Spill Reports
(f) Environmental Training Records
(g) Storage Tank Monitoring Reports
(h) MSDSs

(4) Maintain a HW storage area with proper separation of incompatible wastes.

(5) Establish and implement a Recycling Program that, at a minimum, collects aluminum cans and white paper. Recycle wastes and minimize waste generation whenever possible and feasible.

(6) Track hazardous materials from receipt to disposal. Keep all HW manifests on file for at least 3 years. Maintain a current HM/HW inventory that reflects changes in operations/materials.

(7) Provide the 81st RSC with the information to prepare reports for regulatory agencies, the Army, and DOD upon request.

(8) Ensure that stocking levels of hazardous materials are kept at a minimum. Furthermore, order non-toxic alternatives to toxic materials whenever available and feasible. Refer to the Environmental Products Catalog for suggested non-toxic alternatives.

f. Motor Sergeant - The one person (full-time) most in contact with hazardous materials and hazardous waste. Only applicable for facilities with maintenance Operational Maintenance Shop (OMS).

(1) In coordination with the 81st RSC Environmental Office, designate HM and HW storage areas and inspect them weekly. Refer to Figure 2-1. Ensure that each type of HW generated is accumulated in separate containers. Ensure that the used oil and antifreeze is collected properly and removed when necessary.

(2) Coordinate training for all personnel who come into contact with HM/HW within the normal course of their duties.

(3) Ensure that the washrack and oil/water separator are used properly, kept clean, and maintained in accordance with established guidance found in chapter 8.

(4) Ensure that the facility has adequate HM/HW and spill response supplies/equipment to include spill kits, HW containers, HM labels, HW labels, and HM placards. Refer to (Appendix D).

(5) Implement a facility specific Hazardous Waste Management Plan for tenants (Navy/Marines/Air Force/Coast Guard) as well as other Army activities to achieve the Army's environmental goals and objectives. Army Reserve Centers should incorporate environmental compliance into the

Interservice Support Agreement with tenant activities. When located on an installation, adhere to installation Hazardous Waste Management Plan.

(6) Recycle wastes or minimize waste generation whenever possible and feasible.

g. Unit Environmental Compliance Officers (ECO) - One person from each unit will be appointed as ECO and be responsible for advising the unit commander on environmental issues.

(1) Ensure that training conducted during drill weekend is done in accordance with environmental laws and regulations. Ensure that maintenance conducted during drill weekend is done in accordance with environmental laws and regulations.

(2) Advise unit commander on all environmental issues. For Facility Environmental Compliance Officer, advise facility commander on all environmental issues. Train unit personnel on their environmental responsibilities

(3) Complete ECO training as outlined in Chapter 7.

h. Unit Hazardous Waste Coordinator. One person from each unit will be appointed as the unit Hazardous Waste Coordinator, unless the unit is purely administrative. (Note: This person can be the Environmental Compliance Officer).

(1) Ensure that each type of HW generated is accumulated in separate containers. Ensure that the used oil is collected properly and removed when necessary.

(2) Ensure that the wash rack and oil/water separator is used properly, kept clean, and maintained in accordance with established guidance.

(3) Maintain a current inventory of all HM/HW on hand and provide copies to the local fire department.

(4) Ensure that the facility has adequate HM/HW and spill response supplies/equipment.

i. Unit Supply Sergeants

(1) Maintain a register for 1348s for all HW shipped to the Defense Reutilization and Marketing Office (DRMO). Ensure that HW turn-in documents (DA 1348-1) are completely and accurately filled out before taking the document to DRMO. Refer to state specific guidance for how to fill out DRMO paperwork.

(2) Ensure that the facility has adequate HW management supplies.

(3) Arrange for turn-in of HW at the host installation during training exercises.

(4) Ensure that MSDSs are received on all HM OBTAINED through supply channels and copies are made available to the user of the HM. Submit legible copies to the fire department. Maintain a copy where the material is stored.

j. Nuclear, Biological, and Chemical Non-Commissioned Officer

(1) Inspect all possible Decontamination Solution and Super Tropical Bleach storage sites. Turn in serviceable Decontamination Solution and Super Tropical Bleach to the DLA. If the unit is in possession of Super Tropical Bleach and Decontamination Solution, the Nuclear, Biological, and Chemical Non-Commissioned Officer shall

(a) Ensure that Decontamination Solution and Super Tropical Bleach are stored in separate locations.

(b) Inspect the containers monthly for leakage. Turn the containers to provide internal movement of the contents. Record the results of this activity.

(2) Dispose of all mask filters and expended detection kits as hazardous waste. Return all expired shelf life Nuclear, Biological, and Chemical detection kits to DRMO, support installation.

k. Unit Armorer

(1) Maintain a container for the collection of rifle bore cleaning residue to include the bore patches and weapons cleaning rags. Collect any contaminated rifle bore cleaner in a proper HW container.

(2) Turn in used batteries to DRMO, support installation, or turn-in for one-for-one exchange.

l. PLL Clerk

(1) Requisition mercury and lithium batteries with recoverability code "A" only when a like item and quantity have been turned in.

(2) Turn in used batteries to DRMO, support installation.

m. Individual Soldiers, DOD Civilians, and facility contractors (i.e. janitorial, pest, etc.).

(1) Adhere to established procedures and guidelines in the proper conduct of all training such that all environmental requirements are met. Seek and obtain appropriate training to perform your job.

(2) Contain and clean up small spills immediately. Report any spill or other environmental damage to the Environmental Coordinator or their alternate.

(3) Place HW and regulated wastes in the proper containers. Do not mix different wastes together. Keep each waste clearly identified by its).

Position	Level	Basic Responsibilities
RSC Commander	RSC	RSC Environmental Compliance
RSC Environmental Quality Control Committee	RSC	RSC Environmental Compliance Policy
RSC Environmental Division Chief	RSC	RSC Environmental Compliance Implementation
RSC Environmental Staff Officer	RSC	RSC Environmental Compliance Implementation
RSC Environmental Staff	RSC	Protocol Compliance Implementation
FAST Environmental Managers	FAST	FAST Area Environmental Compliance
Facility Commander	Facility	Facility Environmental Compliance (Facility/Drill)
Facility Manager	Facility	Facility Environmental Compliance (full-time)
Motor Sergeant	Facility	Hazardous Material and Waste (full-time)
Facility Environmental Compliance Officer	Facility	Facility Environmental Compliance (Drill)
Unit Environmental Compliance Officers	Unit	Unit Environmental Compliance (Drill)
Unit Hazardous Waste Coordinator	Unit	Unit HW Handling and Compliance (Drill)
Unit Supply Sergeants	Unit	Unit Level HM Procurement (Drill)
Unit NBC NCO	Unit	Unit Chemical Defense Equipment (Drill)
Unit Armorer	Unit	Unit Weapons Cleaning and Ammunition (Drill)
Unit PLL Clerk	Unit	Unit Batteries and Battery turn-in (Drill)
Individual Soldiers and DOD Civilians	Individual	Task Specific Training / Individual Compliance
Facility Contractors (Grounds, Janitorial, etc.)	Task	Task Specific Training and Job Performance

Figure 1-1 Roles and Responsibilities

CHAPTER 2
HAZARDOUS WASTE (HW) MANAGEMENT PLAN

2-1. Purpose

This Chapter will serve as the Facility Hazardous Waste Management Plan in order to minimize the storage and generation of hazardous waste. The following guidelines have been developed to instruct civilians and military personnel in the 81st RSC on procedures for handling hazardous waste in accordance with all Federal, State, local and DOD regulations.

2-2. General

a. Each waste stream that is generated at a facility must be evaluated to determine if it is a hazardous waste before disposing of the waste. A hazardous waste is any material that exhibits a characteristic of a hazardous waste or is listed as a hazardous waste in the Code of Federal Regulation Title 40, Subpart 261. Characteristics of hazardous waste are:

(1) Ignitability. Meaning that the waste, when tested for Ignitability, has a flash point of less than 60° C (140°F). A waste that exhibits the characteristic of Ignitability has the EPA Hazardous Waste Number of D001.

(2) Corrosivity. Meaning that the waste has a pH of less than, equal to 2, greater than, or equal to 12.5. A waste that exhibits the characteristic of Corrosivity has the EPA Hazardous Waste Number D002.

(3) Reactivity. A waste that is normally unstable and readily undergoes violent change, reacts with water, forms potentially explosive mixtures with water, or when mixed with water generates toxic gases, vapors or fumes, is capable of detonation or an explosive reaction if subjected to an initiating source, heated, temperature change, or pressure change. A waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

(4) Toxicity. A waste that when tested by the Toxicity Characteristic Leaching Procedure contains any of the contaminants listed in the Code of Federal Regulations Title 40, Subpart 261.24.

b. Hazardous waste cannot be disposed of in dumpsters, sewers, training areas, wash racks, oil/water separators, landfills, etc. All hazardous waste must be collected in appropriate containers and managed according to the instructions in this chapter.

c. Personnel working with and/or around hazardous waste will be made aware of the hazards to which they are exposed and the precautions required to protect themselves form such hazards. The appropriate personal protective equipment shall also be available in the work area.

d. A dike, berm, wall or other device must separate incompatible HM/HW from each other and waste should not be placed in a container, which is used to hold an incompatible waste. For example: flammables and combustibles such as fuels, lubricants, solvents, paints and thinners are compatible and may be stored in the same area; however corrosives and oxidizers such as Decontamination Solution and Super Tropical Bleach decontaminating agent are not compatible and may not be stored together. Acids cannot be stored with anything else, in much the same way that oxidizers are to be stored alone. In fact, many acids are incompatible with other acids, an example being citric acid and nitric acid. See Table 2-1 for Compatibility chart.

Compatibility Chart

Incompatible Wastes - Keep the following separated by physical barrier

Reactives ↔ Ignitables
Acids ↔ Caustics (Bases/Alkalines)
Corrosives ↔ Flammables
Oxidizers ↔ EVERYTHING

Table 2-1

2-3. Point of Generation

a. A generator may accumulate up to 55 gallons of hazardous waste or one quart of acutely hazardous waste in containers at or near any point of generation, which is under the control of the operator of the process generating the waste. The container must be labeled according to section 2-6 of this chapter.

b. Once a 55-gallon drum of hazardous waste has been collected at the point of generation, the container must be marked with the date in which the 55 gallons was accumulated. This is called an accumulation start date. The generator has 72 hours (3 days) from the accumulation start date to move the hazardous waste from the point of generation to a Designated Accumulation Storage Area.

2-4. Designated Accumulation Storage Areas

a. Facilities are allowed to accumulate hazardous waste on-site without a permit, if they meet the requirements of section 2-4b of this chapter. The time period that each facility is allowed to accumulate hazardous waste is dependent on the generator status of the facility. The following are generator status definitions and accumulation time periods:

(1) Conditionally Exempt Small Quantity Generator. A generator who generates no more than 100 kg (220 lbs/25 gal) of hazardous waste in one calendar month. If the quantity of hazardous waste accumulated at the facility never exceeds 1000 kg (2201 lbs/250 gal), there is no time restraint for accumulation of hazardous waste at the facility. If a Conditionally Exempt Small Quantity Generator generates more than 100-kg (220-lbs/25-gal) one month out of the calendar, then they will become a Small Quantity Generator for that year and must follow all of the requirements for a Small Quantity Generator.

(2) Small Quantity Generator. A generator that generates more than 100 kg (220 lbs/25 gal) but less than 1000 kg (2201 lbs/250 gal) of hazardous waste in a calendar month. If the quantity of hazardous waste accumulated never exceeds 6000 kg (13,277-lbs/1770 gal), the generator may accumulate hazardous waste at the facility up to 180 days. This accumulated hazardous waste must be in designated accumulation Designated Accumulation Storage Areas and must be managed in a manner to comply with federal, state, local and Army Regulations. Small Quantity Generators must submit generator status forms to the state in which they are located on an annual basis and submit biannual reports every other year.

(3) Large Quantity Generator. A generator that generates more than 1000 kg (2201 lbs/250 gal) of hazardous waste in a calendar month. A Large Quantity Generator may accumulate hazardous waste at the facility up to 90 days. Large Quantity Generators must submit generator status forms to the state in

which they are located on an annual basis and submit biannual reports every other year.

b. Designated Accumulation Storage Areas must be managed as follows:

(1) Different waste streams must not be mixed together. Separate containers are required for each type of waste generated/stored. For example used oil, used brake fluid, and used antifreeze must all be accumulated in separate containers.

(2) The Designated Accumulation Storage Area must be marked as "Hazard Waste Storage/No Smoking Within 50 Feet" with a sign attached to entrance. It should be separated or isolated in some way (i.e. fence surrounding the area, area of concrete marked off, etc.) Store HAZARDOUS WASTE in a separate area.

(3) Containers holding ignitable or reactive waste must be at least 50 feet inside the property line and must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot flames and surfaces, sparks, spontaneous combustion, ignition, and radiant heat. Containers of highly flammable waste should be electrically grounded (wires should lead to grounding rod or system).

(4) The Designated Accumulation Storage Area should consist of a covered, secure area where the hazardous waste containers are protected from the weather and tampering. At least three feet of aisle space is needed between rows of containers to allow access for inspections and emergency response. All labels should be turned facing the aisle so that they are easily readable during inspections and for emergency response.

(5) Containers must be Department of Transportation approved, tightly sealed, and in good condition (i.e. no leaking, bulging, rusting, or badly dented containers). A container in bad condition must be over packed in a Department of Transportation approved container or the contents should be transferred to a good container. An open-head over/pack salvage drum must be used as an outer container for a damaged or rusted container of HAZARDOUS WASTE if the waste cannot be safely transferred to a new container. A granular absorbent to cushion the inner container must surround the damaged container(s).

(6) At least weekly, the Designated Accumulation Designated Accumulation Storage Area must be inspected for leaking and deterioration of the containers and containment system. A written record of this inspection must be available for inspection and maintained for a minimum of three years. At a minimum, the following information must be included on the hazardous waste storage area checklist.

(7) The following equipment must be available at the Designated Accumulation Designated Accumulation Storage Area:

(a) An alarm system for both fire and leak detection.

(b) Communication device to alert authorities in the absence of USAR personnel.

(c) Fire extinguisher mounted outside the building no further than 10 ft from the entrance.

(d) Spill response equipment readily accessible.

(8) A copy of the Spill Response Procedures must be maintained at the Accumulation Designated Accumulation Storage Area.

Common Hazardous Materials/Waste at USAR Facilities

- Solvents
- Methanol
- Methyl Ethyl Ketone
- Paint
- Paint Thinner
- Printing Solution
- Battery Acid/Batteries
- Fuel
- Hydraulic Fluid
- Brake Fluid
- Antifreeze (Etholyene Glycol))
- Bleach/Chlorine
- Detergents
- DS2/STB
- Gas Mask Filters
- Asbestos Brake Linings
- Pesticides
- Laboratory Chemicals

Table 2-2

2-5. Inventory Requirements

a. Hazardous Material/Hazardous Waste Inventory 81st RSC Form 6-R (see Appendix C-2) has been developed to keep track of the hazardous materials and hazardous waste at the facility. This form must be updated semiannually or sooner if process/material changes occur and maintained in the Environmental Records Binder (ERB). Complete a form for each location where hazardous materials and/or hazardous waste are located. This list does not include small amounts used for administrative purposes (i.e. correction fluid, etc.). Make as many copies of the form as needed.

1. A completed form should be sent to the 81st RSC Environmental Manager once a year (15 February). For those facilities that do not have any hazardous materials or hazardous waste, a negative response is required.

2. A completed form should be sent to the local Fire Department once each year (15 February). See Figure 3-2 for an example cover letter to send to the Fire Department. Also include a facility map identifying all the locations where hazardous materials / hazardous waste are stored.

b. Quarterly Hazardous Waste Generator Report 81st RSC Form 5-R (see Appendix C) has been developed to allow the 81st RSC Environmental Office to track all the hazardous waste generated. This will help the Environmental Office evaluate pollution prevention projects, track pollution prevention status, and determine hazardous waste generator status. This form includes the Quarterly Recycling Report. This will allow the Environmental Office to track and report the quantity of materials recycled by the whole 81st RSC.

1. This report form should be completed and maintained in the ERB every calendar quarter. (Jan-Mar, April-June, etc).

2. A copy of this completed form should be sent to the FAST by the 15th of the next month after each quarter ends (15 April, 15 July, 15 October, and 15 January). Every facility should be able to complete, at a minimum, the recycling portion of this form.

2-6. Labeling/Marking

a. When hazardous waste is first placed in a container, affix a red and yellow hazardous waste label to that container. When more than one container of the exact same hazardous waste is placed inside a larger container, the hazardous waste label may be affixed to the large container. Fill out the hazardous waste label as instructed below:

(1) Fill out name and address - Include the facility name, point of contact, building number and street address.

(2) Telephone number of point of contact.

(3) Facility EPA ID NUMBERS (If unknown call your local FAST Environmental Manager).

(4) Manifest Document No. - Leave blank

(5) Accumulation Start Date

(6) EPA Waste No.- look at the MSDS for the EPA Hazardous Waste Number. If missing, call the 81st RSC Environmental Manager.

(7) Identify the contents on the bottom of the document. Include the chemical name or chemical ingredients. The 81st RSC Environmental Manager will determine the Department Of Transportation proper shipping name, the UN or NA number, and the hazard class label. The hazard class label (i.e. flammable, corrosive, etc.) should be placed on the container before it is picked up for disposal.

(b) Non-regulated wastes refer to wastes that are not Resource Conservation and Recovery Act regulated hazardous waste, but must still be disposed of in accordance with state and federal laws. Two examples are used oil and spent batteries. Either stenciling or writing the name of the contents onto the container or placing a Non-Regulated or Non-Hazardous Waste label onto the container, and identifying the contents must identify non-regulated and non-hazardous waste. CONTENTS OF ALL CONTAINERS MUST BE IDENTIFIED WHETHER THE WASTE IS HAZARDOUS OR NOT!

(1) Oil is considered a regulated material and not a hazardous material. As such, used oil and used oil contaminated products will be marked or stenciled as "Used Oil" (See Table 2-3). The term "Waste Oil" should only be used for oil that has been contaminated with something other than water. The term "Oily Water" will be used for oil that has been contaminated with water only.

Containers at USAR Facilities
• Unused Oil Dry / Sorbent
• Used Oil Dry / Sorbent1
• Clean / Unused Rags
• Used / Oily Rags
• Used Oil
• Rifle Bore Patches / Rags

Table 2-3

2-7. Disposal Procedures

a. Refer to your state addendum for DRMO turn-in procedures for you're servicing DRMO. Each installation DRMO has different instructions for the collection and disposal of Hazardous Waste.

b. Chemical Defense Equipment.

(1) Serviceable items or items in use are not considered hazardous waste. Excess serviceable items should be reported for disposition instructions through the normal channels. End items being returned which contain the filters/canisters do not need to have filters removed before return. In many cases (mainly protective masks), the filter element is crucial to the items retaining their form, fit, or function and must not be removed when end item is returned.

(2) Unserviceable stock of Chemical Defense Equipment must be managed as hazardous waste. Do not combine items with different stock numbers in the same drum.

(3) For unserviceable M17 and M10 protective masks or end items containing filters/canisters, which contain Whetlerite Charcoal, separate the filters/canisters from the end item. These components must be disposed of as hazardous waste. The balance of the end item must be reported to the item manager IAW the materiel returns program. Disposition instructions will then be provided. The new 40 series of protective mask does not contain the Whetlerite Charcoal.

(4) It is recommended that each facility minimize the amount of hazardous waste generated. Manual demilitarization procedures are available which specifically address removal and disposal of only the components, which contain the hazardous chemicals. The 81st RSC Environmental Manager, through contact with the Chemical Research and Development Center, will provide demilitarization procedures.

(5) Supertropical Bleach and Decontaminating Solution. Turns in to DRMO either as non-regulated waste or dispose of as Hazardous Waste if the container is in poor condition. Never store Supertropical Bleach and Decontaminating Solution together; they are incompatible wastes. Supertropical Bleach is extremely corrosive. Decontaminating Solution is an oxidizer.

c. Batteries.

(a) Undrained lead-acid batteries should be turned in to DRMO as a non-regulated waste if in good condition. If cracked or leaking, they must be managed as hazardous waste. Batteries should be turned in "wet". DO NOT drain or neutralize batteries.

(b) Batteries should be stacked on a pallet no more than three (3) high and banded with non-metallic banding. If non-metallic banding is not available, insulate the batteries with a layer of cardboard and then band with metallic banding. Store the batteries in a covered area until there are enough for at least one pallet.

(c) All spent, unserviceable mercury, lithium, magnesium, and nickel cadmium batteries must be managed, as hazardous waste (must be turned in separately), unless they can be turned in for one-for-one exchange.

c. Radioactive Waste. It is prohibited by law to dispose of radioactive materials (such as the LAW Front Site, which contains Promethium 147 Isotope or the M8A1 Alarm (Americium)) in a dumpster, or by any other unauthorized means. For instructions on proper disposal, contact either the Installation Radiation Protection Officer (Safety Office) or your FAST Environmental Manager. Dispose of unserviceable smoke detectors (radioactive source) through the support installation fire department.

d. Asbestos.

(1) Materials with asbestos such as tile or brake linings must be double bagged in plastic bags of six millimeter minimum thickness with air squeezed out, taped at top with duct tape, and the outer bag labeled with the complete address of the generator in addition to the following statement: DANGER CONTAINS ASBESTOS FIBERS. AVOID CREATING DUST. CANCER AND LUNG DISEASE HAZARD.

(2) Notify the landfill operator so that the bags can be immediately covered after they have been placed in the landfill.

e. Used Antifreeze.

(1) At most RSC facilities, Safety Kleen antifreeze and used oil is picked up and recycled off-site. They normally are not manifest as a hazardous waste. However, in certain instances, lead has been found in the antifreeze at such levels that it must be considered a hazardous waste. If you receive a hazardous waste Manifest when your antifreeze is picked up, include antifreeze on your monthly hazardous waste generator report and contact your FAST Environmental Manager for other disposal alternatives.

(2) Under no circumstances will used antifreeze be disposed of by dilution through the sanitary sewer system.

f. Other Disposal Procedures.

(1) If a Hazardous Waste requires immediate disposal for health and safety reasons, the engineer IMPAC credit card may be used to procure disposal from a local vendor. The request for environmental service is no different from other engineer services. Submit a 516-E-R with 3 different vendor bids and request approval through the FAST Environmental Manager.

(2) Paint Related Materials.

(a) Any unopened usable paint or solvent should be turned in to DRMO as a Hazardous Material. If the material is hazardous (i.e. lead based, flammable) the letters hazardous materials should be marked.

(b) Waste paint related material (unusable) - if the containers are in bad condition, or the contents have started to harden, a hazard determination should be made. If hazardous, it must be managed as a hazardous waste. If not hazardous, paint may be disposed of at a landfill.

(c) Paint Thinner/Stripper - Unusable paint stripper must be managed as a hazardous waste. When determining the EPA Hazardous Waste Number for spent paint stripper, the EPA Hazardous Waste Number of the paint, solids must also be determined, since the act of stripping paint could involve picking up another hazardous constituent such as the lead or chromium found in some paints.

(3) Empty Containers.

(a) A container is considered <u>empty</u> if all hazardous substances have been removed using the practices commonly employed to empty materials from that type of container AND:

1 No more than 2.5 cm (1 inch) of residue remains on the bottom of the container or inner liner, OR

2 No more than 3% by weight of the total capacity of the container remains in the container or inner liner if the container is 110 gallons or less in size; or 0.3% if greater than 110 gallons, WHICHEVER IS LESS.

(b) Small <u>empty</u> containers are not hazardous and may be thrown in the dumpster. Large empty drums should be turned in to the DRMO as non-hazardous waste.

(4) Brake fluid/transmission fluid/hydraulic fluid. Must be handled as a hazardous materials/hazardous waste. Do not mix used brake fluid and used transmission/hydraulic fluid in the same container.

(5) Solvent/degreaser/cleaning compounds.

(a) Reserve facilities that use solvent to degrease or clean parts should have a contract with a vendor (such as Safety Kleen). Those activities which need another type of solvent for their operation, or for whom the use of a Safety Kleen unit is not practical must handle the solvent as a hazardous materials/hazardous waste. Do not mix different types of used solvent in the same drum.

(b) Oily rags will not be thrown into the dumpster. They will be laundered and reused. To minimize the amount of hazardous waste generated, keep oily rags separated from solvent rags (or rags soaked with hydraulic fluid, etc.). Towels/absorbents used to clean up hazardous waste must be managed as hazardous waste. Rags destined for laundry are not considered a hazardous waste address.

(6) Rags/paper towels/sorbents. Generally, solvent rags used in cleaning or degreasing operations and rags/paper.

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.

IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:

NAME_____

ADDRESS_____ PHONE _____

CITY _____STATE_____ ZIP_____

EPA ID NUMBER /
MANIFEST DOCUMENT _____/_____

ACCUMULATION START DATE _____ EPA WASTE NO._____

_____

_____

_____

DOT PROPER SHIPPING NAME AND UN OR NA NO WITH PREFIX.

HANDLE WITH CARE!

Figure 2-1 Hazardous Waste Label

CHAPTER 3
HM MANAGEMENT

3-1. Purpose

This plan has been prepared to establish procedures for the storage, handling, and overall management of hazardous materials. It is to provide guidance to the facilities, units and full-time personnel in order to insure compliance with federal, state, local and Army Regulations. The is to reduce HM usage and the subsequent generation of HW associated with HM usage.

a. It is important to note the difference between HM and HW. HM are chemicals or other substances that are potentially dangerous to human health and safety or the environment when improperly treated, stored, transported, or otherwise managed. A HM becomes a HW when it can no longer be used for its intended purpose because it is spent, obsolete, or contaminated.

b. The types of HM commonly found at Army Reserve facilities include solvents, detergents, petroleum, oils, and lubricants (POL) products, hydraulic fluid, coolants, battery acid, paint-related materials (paints, strippers, and thinners), pesticides, asbestos, pharmaceuticals, printing solutions, bleach, and decontaminating liquids.

c. Personnel working with and/or around HM and HW shall be made aware of the hazards to which they are exposed and the precautions required to protect themselves. Refer to Chapter 4, Hazard Communication. The appropriate safety equipment shall also be made available in the work areas. This information is available on the products Material Safety Data Sheets (MSDS) or through the Hazardous Materials Information System. If the MSDS is not available, contact the supplier or the chemical manufacturer. Information on those items with a National Stock Number (NSN) can usually be found using the Hazardous Materials Information System. For the Hazardous Materials Information System, call the FAST Environmental Manager. If you have access to the Internet, MSDS are available by NSN at http://haz1.siri.org/msds/.

3-2. Storage Requirements

a. Good housekeeping practices are essential to safety as well as to efficient storage operations. Many potential accidents and fires are prevented when warehouses and outside storage areas are maintained in a clean and orderly condition.

b. OSHA regulations require employers to maintain a MSDS for each hazardous chemical on-site. A file of all MSDSs should be kept in the office of the Facility Commander or their appointed representative, in all storage/handling areas, and with local emergency response personnel.

c. The storage of HM carries with it the inherent risk of leaks and/or spills and the subsequent potential for hazardous spill residues. Therefore, the amount of HM in storage should be held to a minimum.

d. Most facilities have a hazardous material storage building, which has secondary containment. Ensure proper utilization of the building. All POL items, paints and fuels can be stored in these buildings.

e. Inspect the storage/dispensing areas weekly to ensure that:

(1) No leaking or severely corroded drums are present.

(2) All containers are sealed and properly labeled.

(3) Large or heavy containers are placed on pallets for easy access by a forklift.

(4) A file containing the MSDSs of all hazardous materials is located nearby.

(5) Dispensing drums have a spring action or automatic closing device.

(6) Containers are located in HM/HW storage buildings at all times to prevent drums from rusting.

(7) Dispensing containers are in the doubled-floored buildings to catch waste when a leak or spill should occur.

(8) A dike, berm, wall or other device separates incompatible materials from each other.

(9) Sufficient absorbent material should be on hand to adequately control and clean up a spill of the largest container.

(10) The storage of any chemical shall not physically obstruct an exit.

(11) No combustible trash material shall be allowed to accumulate in the storage facility. Spilled materials shall be immediately cleaned up and disposal of in accordance with applicable regulations.

(12) Unauthorized entry of persons into HM/HW storage buildings must be controlled. Signs with the legend "Danger - Unauthorized Personnel Keep Out" and "No Smoking" if flammables are present must be posted at each entrance to the storage facility. Placards shall be placed on the exterior of the hazardous materials storage area.

f. Regulations concerning the storage of flammable/combustible materials.

g. Transporting HM. Personnel must remember the dangers of transporting HM. This is especially true of units, which transport bulk amounts of fuel or fog oil. In accordance with federal DOT laws, drivers must be properly trained and be able to respond to a HM accident or spill. In addition, each tanker transporting hazardous materials should have spill procedures and spill kits on board.

h. Hazardous Material Classification: HMs is classified according to their hazardous physical properties. These classifications are used for identifying potential risk to both humans and the environment. The four hazard classifications are as follows:

(1) Ignitable: a liquid that has a flashpoint less than 140 degrees Fahrenheit (example: gasoline).

(2) Corrosives: any chemical that causes burns upon physical contact to humans or causes metals to corrode (example: battery acid and lye/bleach).

(3) Reactives: normally unstable chemicals that can react violently without detonations (example: Supertropical Bleach and Decontaminating Solution reacts violently).

(4) Toxics: chemicals that are harmful or fatal when ingested or absorbed (example: Chlorine).

(5) Incompatibility: Many HM/HW, when mixed with other waste or materials, can produce effects which are harmful to human health or the environment, such as: heat, pressure, fire, explosion, violent reaction, toxic dust, mist, fumes, gases, flammable fumes or gases. A dike, berm, wall or other device must separate incompatible HM/HW from each other, and waste should not be placed in a container, which previously held an incompatible waste. For example, see Table 2-1.

i. Compressed Gases. Because compressed gases are under pressure, such gases must be stored with extreme care, particularly flammable and explosive gases. Compressed gas cylinders must never be exposed to fire, sparks, or electrical circuits. In addition, breathing of these gases can cause injury and death. The following are some general precautions and storage criteria for compressed gases:

(1) All compressed gas storage areas will be separated from other buildings by at least 50 feet.

(2) Suitable material handling equipment will be used for lifting and moving cylinders.

(3) *NO SMOKING* signs will be posted and enforced around compressed gas storage areas.

(4) Empty cylinders should not be stored with full cylinders on the same pallet or same stack.

(5) Keep valves on all cylinders tightly closed. Store cylinders upright with value covers on to prevents any valve damage. Upright cylinders must be secured with a strap or chain to prevent them from falling and experiencing a violent pressure release due to a broken valve or rupture.

j. Storage of New 55 Gallon Drums. The preferred method of storing new 55-gallon drums containing liquid products is horizontally rather than upright. Horizontal storage prevents water accumulation on the top, more orderly and safer storage, and offers more efficient surveillance, periodic inspection, and maintenance. Drums should not be stacked more than three high and stored on a stabilized surface, preferably in a HM storage room or storage building. Bungs should be placed at the 3 o'clock or 9 o'clock position to reduce the chance of leakage.

3-3. Inventory Requirements

a. HM Inventory: the first step in the HAZCOM program is to inventory your facility for all HM. Any chemical with a MSDS is a HM. Any chemical that has *CAUTION* or *WARNING* on the label should be considered a HM.

b. A HM/HW Inventory Form 6-R (see Appendix C-2) has been developed to keep track of the HM and HW at facility level. This form must be updated every 6 months or sooner if process/material changes occur. Include all HM located in the area whether it is used by the facility or not. This list does not include small amounts used for administrative purposes (i.e. correction fluid, ink, etc.). Make as many copies of the form as needed. Organize hazardous materials by location. A completed form(s) should be sent to your local FAST Environmental Manager once a year (September). At the same time, submit the inventory to your local fire department using Figure 3-2 as a cover letter.

c. Emergency Planning and Community Right-to-Know Act (EPCRA) provides local governments with information about possible chemical hazards in the community. This is also known as SARA Title III. If HM is maintained at established threshold amounts, then Form R must be completed and submitted to Local Emergency Planning Committees and the local fire department. Based upon a review of USAR inventories, the 81st RSC has no facilities, which meet these threshold quantities.

3-4. Labeling/Marking

The EPA has adopted certain regulations of the Department Of Transportation governing the transport of HM. These regulations specify the labeling, marking, vehicle placarding, and proper containers, which must be used when a shipment is made. Labels and placards can be obtained through the supply system or by ordering them via local purchase.

a. Labeling. A label is defined as any diamond, square, or rectangular shaped attachment to a package that identifies the hazardous nature of a material. HM labels must meet the following specifications:

(1) The label must be durable and weather resistant. Markings or attachments must not obscure labels.

(2) Each diamond label must be a minimum size of 100mm (3.9 inches) on each side, with each side having a black solid border 5.0 to 6.3 mm (0.2 to 1/4 inches) from the edge.

(3) Label colors must be as specified in 49 CFR §172.411 through §172.488. The specified color must extend to the edge of the label. Each label must be affixed to a background of contrasting color, or must have a solid or dotted line outer border.

(4) Each label placed on a container of HW must be printed on or affixed to the surface of the container, near the marked proper shipping name.

(5) Labels may be printed or placed on a securely affixed tag if the container surface is irregular or the labels cannot be satisfactorily affixed.

(6) When two or more labels are required, they must be displayed or affixed within 150 mm (6 inches) of one another.

b. Marking. Container marking means applying the required descriptive name, instructions, cautions, weight, specification marks, or any combination of these items to the outside of HW containers.

(1) A HM Label must be affixed to ANY container that holds HM. This may be required if a manufacturer's label has fallen off or if containers are used to transfer HM from one place to another (e.g. a 5 Gal can used to collect and carry used oil). The HM Label or stencil must describe the HM adequately - Common name / Descriptive name, instructions, cautions, weight, or specification marks.

(2) It is acceptable to stencil all of the required information on the containers. Remember to stencil ALL containers to include those listed in Table 2-2. The markings should be checked periodically to ensure the information entries have not faded and reentered as needed.

FIRE DEPARTMENT EXAMPLE

Date

Your Local Fire Department
Address
City, State, Zip

This letter is to advise you of toxic/hazardous material located at our facility. This facility is an United States Army Reserve Facility managed by the 81st Regional Support Command (81st RSC). Our facility has an administrative building with a small motor pool / maintenance activity (*Provide appropriate description of your facility*).

This facility has completed a HM/HW Inventory on our premises and submits the inventory with site map (enclosed) *(include map layout of entire facility with hazmat building/storage facilities clearly identified*). This list will be updated as significant changes occur.

IAW 81st RSC Environmental Handbook, we also expect to have emergency response support from your activity in case of a hazardous material release. As you may or may not be aware, we have a rotating stock of various petroleum oil and lubricants and other typical maintenance HMs.

We would welcome your inspection of our facility for fire hazards of which we may not be aware. Do not hesitate to call should you have any questions pertaining to this inventory. The technical expert on our HM inventory is our Environmental Manager, *Your FAST Environmental Manager, and Their Telephone Number*. The point of contact at this facility is *Your Name*, *Your Phone Number*. Thank you for your cooperation.

Sincerely,

Your Name
Your Title

Enclosure

Figure 3-2

CHAPTER 4
HAZARD COMMUNICATION

4-1. Purpose

a. Hazard Communication (HAZCOM) is required by Occupational Safety and Health Administration (OSHA) and mandates that all employees exposed to HM in the workplace have the right to know the dangers of these HM. The purpose of HAZCOM is to reduce the risk of injury/illness to workers from HM/HW found in the work place. The standard requires that workers be informed about HM/HW in their work areas and be trained to work safely with these materials.

b. The Hazard Communication Program is a written document, which describes how a unit, facility and/or activity complies with all the requirements of the federal Hazard Communication Standard. This chapter will serve as a HAZCOM Program.

c. HM Inventory: the first step in the HAZCOM program is to inventory your facility for all HM. Any chemical that has the words "CAUTION," "WARNING," "DANGER" OR "POISON" on the label should be considered a HM. A HM inventory should be conducted every 6 months.

d. HAZCOM Training: all personnel working with HM are required by federal law to receive HAZCOM training once they begin work and annually thereafter. HAZCOM training is designed to inform your employees of any potential chemical hazards they may experience in the workplace. The employee must understand that it is their "Right to Know" the health hazards they may encounter. The following should be included in your HAZCOM training (29 CFR 1910):

(1) Definitions and purposes for HAZCOM, HM, MSDS, HM Inventory

(2) Physical and Health Hazards

(3) Personal Protective Equipment (PPE) and Decontamination

(4) Proper labeling, storage and handling of HM

(5) Emergency Procedures

e. Personnel working with and/or around HM and HW shall be made aware of the hazards to which they are exposed and the precautions required to protect themselves.

f. All 81st RSC facilities are responsible for determining which employees are exposed to HM. Those employees identified by the facility will require HAZCOM training.

g. Emergency Planning and Community Right-to-Know Act provides local governments with information about possible chemical hazards in the community. This is also known as SARA Title III.

4-2. Workers Safety and Right to Know

a. The OSHA under 29 CFR 1910.1200 mandates hazards Communication.

b. All new employees, both full-time and reservist, are to be briefed on Hazardous Material in the workplace which may affect worker health and safety. This briefing must be completed within 30 days of job placement. See Chapter 7. The essential parts of the briefing should include what items are on hand, where the MSDS sheets are located and any non-routine tasks that are involved.

4-3. MSDS

a. Add DOD 6050.5-L, DOD Hazardous Material Information System to your DA 12 Series (Form 12-04, block 0610.) This publication comes as a multiple set of CDs and contains Material Safety Data Sheets (MSDS) for chemicals (hazardous materials) in the National Stock System. An additional source of MSDS's is the Internet at http://haz1.siri.org/msds/.

b. The objective of the MSDS sheets is to concisely inform persons about the hazards of the materials they work with so that they can take the needed protections. Workers must have access to MSDS and be trained to read and understand them. The purpose of an MSDS is to tell persons: the material's physical properties or fast acting health effects that make it hazardous to handle, the level of protective gear needed, the first aid treatment when exposed to a hazard, the pre-planning needed to safely handle spills, fires and daily operations and how to respond to accidents.

(1) Material Identification. Information in this section identifies the material and supplier. The MSDS material must match the name on the container. If the material has more than one name, each is listed. The chemical formula may be given. A National Fire Protection Association hazardous fire diamond may appear. This provides number ratings for the degree of flammability, reactivity, and health hazards.

(2) Ingredients and Hazards. Information in this section lists the individual hazardous components and their relative percentage of concentration. Exposure to certain hazardous materials may be acceptable, but only for periods not to exceed certain limits and concentrations. Limits are expressed on the MSDS. Should jobs require exposure for periods exceeding the limits expressed on the MSDS, then wearing protective clothing or taking other protective measures as described on the MSDS is vital.

(a) Exposure levels are set for most healthy adult workers. Lower exposure levels are necessary for persons at a higher risk; i.e. elderly, pregnant, younger workers, smokers, etc. or persons already exposed to other materials for which exposure limits have been set. Exertion increases the effects of exposure.

(b) Exposure to more than one hazardous substance can be harmful, due to combined effects.

(3) Physical Data. Physical data includes a material's boiling point, solubility in water, viscosity, specific gravity, melting point, evaporation rate, appearance, odor, etc.

(4) Fire and Explosion Data. The information in this section indicates the protective clothing or respiratory equipment fire fighters should use and the type of extinguishing materials to best fight a fire.

(5) Reactivity. In order to determine proper storage and handling of a material, reactivity information is very important. The information in this section can guide choices of materials for containers, shelving personal protection clothing and devices, and temperatures.

(6) Health Hazard Information. The information in this section identifies routes of entry into the body by exposure to hazardous material. Routes of entry include eyes, skin, breathing, swallowing. Acute (immediate) and chronic (long-term) health effects are stated on the MSDS. Medical and first aid treatments are also described.

(7) Spill, Leak and Disposal Procedures. This section can advise on how to contain and cleanup a spill while safeguarding health and environment.

(8) Special Protection. Methods for reducing exposure are described in this section. Methods may include ventilation requirements, protective breathing apparatus and clothing such

as gloves, safety glasses and aprons. If the MSDS requires the wearing of special equipment, it is the employer's responsibility to provide the equipment and to insure its use.

(9) Special Precautions and Comments: Safe storage and handling, labeling or marking and U.S. Department of Transportation policies are described in this section.

c. For each HM, you should have a MSDS. The MSDSs should be kept in a binder, which is centrally located and easily accessed within the facility. If there are multiple buildings, then there will need to be more than one MSDS binder. The MSDSs should be organized in a manner, which will make them easy to find in emergency situations (i.e. alphabetical). Employees should be informed where the MSDSs are located within the facility.

d. Follow the general storage procedures discussed in this section and the specific requirements described on the MSDS.

e. OSHA regulations require employers to maintain a MSDS for each hazardous chemical on-site. A file of all MSDSs should be kept in the office of the Facility Commander or their appointed representative, in all storage/handling areas, and with local emergency response personnel.

f. The storage of HM carries with it the inherent risk of leaks and/or spills and the subsequent potential for hazardous spill residues. Therefore, minimize the amount of HM maintained on hand.

g. Most facilities have a hazardous material storage building, which has secondary containment. Ensure proper utilization of the building. Inspect the storage/dispensing areas weekly to ensure that (See Checklist in Appendix C-1).

(1) No leaking or severely corroded drums are present.

(2) All containers are sealed and properly labeled.

(3) Large or heavy containers are placed on pallets for easy access by a forklift.

(4) A file containing the MSDSs of all hazardous materials is located nearby.

(5) Dispensing drums have a spring action or automatic closing device. Dispensing containers are in the double-floored buildings to catch waste if a spill should occur.

(6) Containers must be located in HM/HW storage buildings at all times to prevent exposure to the elements. The storage of any chemical shall not physically obstruct an exit.

(7) A dike, berm, wall or other device separates incompatible materials from each other.

(8) Sufficient absorbent material should be on hand to adequately control and clean up a spill of the largest container.

(9) Unauthorized entry of persons into HM/HW storage buildings must be controlled. Signs with the legend "Danger - Unauthorized Personnel Keep Out" and "No Smoking within 50 Feet" if flammables are present must be posted at each entrance to the storage facility.

(10) No combustible trash material shall be allowed to accumulate in the storage facility. Spilled materials shall be immediately cleaned up and disposed of in accordance with applicable regulations.

CHAPTER 5
SPILL RESPONSE PLAN

5-1. Purpose

a. In the event of a spill, personnel at the site of the spill should take immediate measures to control, contain the spill, and reduce fire and health hazards. However, personal safety will remain the first and highest priority. Depending upon the nature of the spill and the hazardous or toxic materials involved, the senior person on the scene should ensure the safety of personnel while undertaking containment measures. This plan is written to outline the actions necessary to maintain personnel safety and minimize environmental damage.

b. Spills will require documentation by the Facility Manager. At a minimum, 81st RSC spill report must be filled out and submitted to the FAST Environmental Staff Officer (see Appendix J-2).

5-2. Spill Response Procedures

a. Installation Spill Contingency Plans are required from all Army installations and activities that store, handle, or transfer oil or hazardous substances, for which there is a reasonable possibility of a spill or release into the environment of a reportable quantity of product (see Appendix I).

b. Spills must be handled properly to prevent any serious long term environmental damage. Most Petroleum, Oil, and Lubricant spills on paved surfaces can be handled with Oil-Dry or some other absorbent. Gasoline or solvent spilled onto the ground or into a storm drain is much more serious. Acids and caustics will require the fire department's assistance, as will most spills larger than 5 gallons.

c. Below are the basic instructions for an incidental spill (Petroleum, Oil, and Lubricant or most spills less than 5 gallons):

(1) Extinguish smoking materials and remove sources of ignition from the area.

(2) IF IT IS NOT DANGEROUS - STOP the source of the spill and place absorbent material on the spill to contain it.

(3) Dike around the spill to prevent it from entering drains, sewers and waterways, if this can be done safely (if the material is flammable DO NOT use a metal shovel that could produce a spark).

(4) Secure the area. Keep unauthorized persons out of the area.

(5) If necessary, notify the Fire Department. Then, call your FAST Environmental Staff Officer. DO NOT touch the spilled material or attempt clean up without the proper equipment, training and authorization.

(6) Fill out and submit a completed Spill Report Form, Table 5-3. This task must be completed within 24 hours of the spill.

(7) Clean up the spill, if possible. If impossible, contract the clean up through the FAST.

(8) Spill response should be practiced as a drill at least once every 12 months. This task must be performed in a drill where no personal protective equipment would be required to stop the source of the spill. It should be a "mock" incidental spill, which can be contained with the spill response equipment available. REMEMBER NEVER RISK YOUR SAFETY OR YOUR PERSONNEL SAFETY, YOU CAN ALWAYS WAIT FOR THE FIRE DEPARTMENT TO ARRIVE ON SCENE.

d. Reporting requirements. Table 5-1 lists each state's reporting requirements in the 81st
RSC. The RSC Environmental Division will notify the state if a reportable spill occurs.

e. Facilities must post the spill response procedures (Figure 5-1) at EVERY location where a spill may occur, to include the OMS building, HM/HW storage buildings, and storage rooms.

f. Movement Brief: Convoy Commanders should brief proper HM Emergency Response Procedures during his/her Convoy Movement brief. The convoy commander needs to develop a spill response plan that reflects all vehicles and hazardous materials being transported. A sample of a Tanker/Convoy Spill Contingency Plan is located at Appendix J. This brief should include:

(1) Point Of Contact for any incident or spill. Review of convoys spill response plan.

(2) Which vehicles have HM (to include fuel tankers) located on them?

(3) Emergency Spill Procedures. These must be practiced and understood by all members
Of the convoy. Spill response drills should be performed before the convoy briefing.

(4) Location of spill response material.

(5) All tankers must have a Tanker Spill Contingency Plans issued at time of dispatch. (See Appendix J)

(6) Emergency Notification Procedures. All spills will be reported to the FAST Environmental Manager within 24 hours of discovery.

g. Clean-up Procedures.

(1) All facilities that store HM/HW should have spill kits available to handle small spills. Any small acid spills should be neutralized with baking soda and washed down with water.

(2) Most facilities also have Oil-Dry or some other vermiculite or peat based granular absorbent. Remember to spread this over the spill and then collect it up soon thereafter. It does little good to throw down a layer of Oil-Dry and then sweep it up 2 weeks later, after rain has fallen and the sun has evaporated most of the spilled material.

(3) If the spill is too large to handle with your spill kits and absorbent, then you will have to seek an outside contractor, probably using the Engineer IMPAC Credit Card (516-E-R).

(4) DRMO is an option as is a local contractor. Contact your FAST Environmental Manager for assistance and funding authorization.
Products. Most kits on hand are not designed for acids and other chemical spills. Use these kits to absorb the bulk of the spilled material.

(5) All contaminated material should be disposed of in an overpack barrel. Once the barrel is full, contact your FAST Manager for disposal.

h. References.

(1) AR 200-1, Chapter 3, dtd 21 Feb 1997

(2) DA PAM 200-1, Chapter 3, May 1996

STATE REPORTING REQUIREMENTS

	POL	DIESEL	ANTI-FREEZE	OTHER CHEMICALS	RSC ENVIR CONTACT	STATE SPILL CONTACT NUMBER
FL	5 GALS	5 GALS	ANY AMOUNT	ANY AMOUNT	404-286-6326 or 205-940-3542	904-413-9911
GA	25 GALS	25 GALS	ANY AMOUNT	ANY AMOUNT	404-286-6326 or 205-940-3542	404-656-6905
AL	25 GALS	25 GALS	25 GALS	ANY AMOUNT	404-286-6326 or 205-940-3542	800-843-0699
KY	25 GALS	25 GALS	25 GALS	ANY AMOUNT	615-885-8766 or 205-940-3542	800-928-2380
TN	ANY	ANY	ANY AMOUNT	ANY AMOUNT	615-885-8766 or 205-940-3542	615-741-0001
MS	25 GALS	25 GALS	25 GALS	ANY AMOUNT	615-885-8766 or 205-940-3542	601-352-9100
NC	ANY	ANY	ANY AMOUNT	ANY AMOUNT	803-751-6757 or 205-940-3542	800-858-0368
SC	5 GALS	5 GALS	ANY AMOUNT	ANY AMOUNT	803-751-6757 or 205-940-3542	803-896-4092

Table 5-1

SPILL RESPONSE PROCEDURES

1. PROTECT YOURSELF - Wear adequate personal protection when responding to a spill. **CHECK THE MSDS FOR PROPER PROTECTION INFORMATION**. Identify the material spilled and wear the correct equipment such as those listed below:

A. Proper Protective Gloves
B. Proper Eye Protection
C. Protective Apron
D. Rubber Over Boots

2. STOP THE FLOW - Flow must be stopped or slowed for effective containment and to limit any possible contamination.

A. Plug or patch a punctured container.
B. Stand an overturned or tipped container upright.
C. Close appropriate valves.

3. CONTAIN THE SPILL - The spilled substance must be contained within the immediate area to prevent flow to drains, drainage ditches, sewer systems, etc.

A. Place non-reactive absorbent material such as Sorbent pads, sand, peat, vermiculite, Oil-Dry etc. on the spill.
B. Block the spill from entering the storm water drainage system by constructing a dike around all points of entry. Use the Drain Blocker rubber mat to cover the drain, if available.
C. If the spill is on the ground, clean it up immediately by digging up the contaminated soil, placing it in a proper container, and disposing of it properly.

4. REPORT THE SPILL - If the spill is beyond your control contact the **Fire Department at 911 Immediately,** then call 81st RSC, Facility Area Support Team (FAST) at _____. If you can control the spill, you still must report it to the FAST, 81st RSC. Provide all pertinent information (submit Figure 5-3 via fax to your local FAST Environmental Manager):

A. Location of the spill.
B. Substance spilled.
C. Estimated amount spilled.
D. Extent to which the spill has traveled.
E. Any other pertinent information required in SPCCP.

Ensure Facility Environmental Manager and Environmental Coordinator are aware of spill:

Environmental Manager _____ Phone: _____
Work / Home

Environmental Coordinator _____ Phone: _____
Work / Home

OTHER EMERGENCY NUMBERS:

Police: _____ Emergency Medical Service: _____

Hospital: _____ Poison Control Center: _____

Figure 5-1

CHAPTER 6
TANK MANAGEMENT

6-1. Purpose

The purpose of the Tank Management Program is to achieve the regulatory requirements for both Underground Storage Tanks (UST) and Aboveground Storage Tanks (AST) to include secondary containment, proper installation, corrosion protection, leak detection, spill/overfill prevention and proper closure.

a. Regulations governing UST requirements are found in the Code of Federal Regulation (40CFR) Part 280, Technical Standards and Corrective Action Requirements for Owners and Operators of UST.

b. The ASTs are regulated by 40 Code of Federal Regulations, Part 112, and Oil Pollution Prevention.

6-2. UST Requirements

a. Definition: An UST is any one or a combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances (i.e. HW, waste oil, fuel) that has at least 10 percent of its volume underground. NOTE: Oil water separators are not considered USTs in most instances.

b. Most USTs within the RSC have been removed; however, there may be unknown UST's at your facilities. You should look for the following items, which indicate you may have a UST on the facility property:

(1) Any unknown pipes coming up from the ground.

(2) Any unknown pipe running from the ground upward alongside a building.

(3) Any unknown small manholes or manhole type covers on the surface of the ground.

c. Facilities that have had their UST's removed need to keep a copy of the UST closure report on file. If your facility does not have a copy of the UST closure report, contact the FAST Environmental Manager.

d. In order to comply with the EPA regulations; the Army developed guidance on USTs, AR 200-1, paragraph 4-5. The Army's UST guidance requires compliance with the most stringent of Federal, State, or local regulations, with no exclusion for heating oil USTs, and OCONUS activities to comply with the more stringent of Army or host nation requirements. Specifically, AR 200-1 requires new and replacement regulated USTs and all UST systems over 600 gallons to be double wall constructed, have interstitial monitoring, and secondary containment for associated piping. New unregulated UST systems below 600 gallons may use single wall construction with cathodic protection. In addition, no hazardous waste should be stored in USTs, and all inactive/abandoned USTs should be removed immediately.

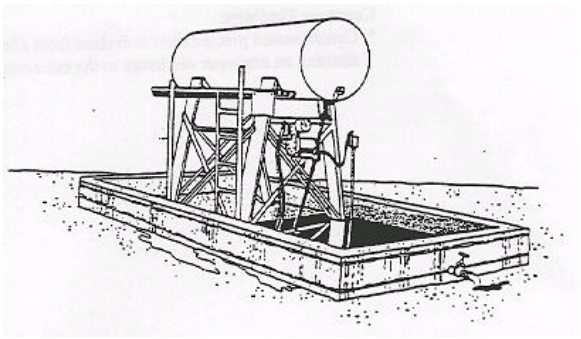


Figure 6-1 AST with Secondary Containment

e. For those facilities that have USTs, there are 3 basic requirements that have compliance implications: Spill/overfill prevention, corrosion protection, and leak detection.

(1) The spill/overfill prevention requirement is the installation of some device or mechanism that will prevent spillage or overfilling from occurring. This can be achieved by installing an automatic shut off device, a flow restrictor, or some type of warning alarm indicating that the tank is nearing its fill capacity. This requirement must be installed by December 1998.

(2) The corrosion protection requirement assures EPA that the UST system is protected from deterioration by corrosion. Installing a system made from fiberglass reinforced plastic is one method allowed by EPA. The other method allowed is providing cathodic protection on steel tanks. This requires installing sacrificial anodes to the tank, which would draw corrosive ions away from the tank. The anodes would then corrode sacrificing its composition in place of the tank. This requirement must be installed by December 1998.

(3) Finally, there is the leak detection requirement. By January 1999, the 81st RSC will have upgraded all of its remaining USTs to meet the new requirement for interstitial leak detection devices. As an added effort to ensure leak detection, inventory control should be performed religiously. This means that fuel usage should be compared against fill data to ensure that they are consistent.

6-3. AST Requirements

These tanks are sometimes 55-gallon drums. More often, however, they are fuel pods or tanks with POL, hazardous waste or chemical products. Refer to figure 6-1 for an example AST configuration with secondary containment.

a. Stationary AST: Any container above ground or underground in a vault with more than 40 gallons of a hazardous material or waste.

b. Mobile ASTs are not regulated as stringently as stationary ASTs. Mobile ASTs must be truck or trailer mounted and the fuel pods must not be placed or secured on the ground. The trucks cannot be filled and stationary for more than 72 hours. After 72 hours, the vehicle will be considered stationary and will, at a minimum, require temporary secondary containment.

c. Storage of bulk fuel is prohibited in the 81st RSC. Permission for fuel storage must be formally requested.

d. Secondary Containment. This is defined as an area around an AST to contain 110% of entire volume of the AST to prevent spills from migrating into the environment. Containment measures include berms, dikes or channels around storage tanks. The entire containment system, including walls and floors, must be impervious. They may be permanent or temporary. All secondary containment systems must be equipped with a drain valve. This emergency drain valve should remain closed and locked during normal operation and only opened to drain accumulated rainwater. Refer to Figure 6-1 for an example AST configuration with secondary confinement.

e. ASTs pose a significant spill hazard potential due to the large quantities of product normally stored. The primary

products stored are heating fuel, used oil diesel fuel, MOGAS, JP-8, and solvents.

f. Operational Requirements.

(1) Keep area clean and orderly. Clean up small spills immediately.

(2) Keep spill clean up equipment on-site. These include non-sparking shovels, gloves, disposable clothing, and Sorbent material.

(3) Keep Material Safety Data Sheets (MSDS) on-site for all product handled.

(4) Have drain blockers / covers readily available. Cover storm drains and floor drains in the event of a leak or spill.

(5) Post the Spill Response Procedures on-site (See Chapter 5).

(6) Personnel working around dispensing and container storage areas prohibit smoking. In addition, no open flame is to be used and extreme care should be exercised to prevent creating sparks.

CHAPTER 7
TRAINING

7.1. Purpose

To establish guidelines and format for training programs. Training will be designed to enhance the General Awareness of all personnel. This chapter will cover training requirements for both initial and sustaining training, course content and availability, and record keeping.

7-2. Training Requirements

a. General. Training is broken down into two categories: initial and sustaining. All personnel are divided into six groups, in order to determine the amount and type of training needed.

(1) Area Maintenance Support Activity (AMSA), Equipment Concentration Site (ECS) and Aviation Support Facility (ASF) Foreman.

(2) AMSA/ECS/ASF Technicians, OMS Supervisors, and OMS Motor Sergeants (full-time).

(3) Facility Manager and Facility Coordinators (full-time)

(4) Facility and Unit Environmental Compliance Officers and Unit Hazardous Waste Coordinators.

(5) Facility Commanders and Unit Commanders.

(6) All other reservists and full-time administrative personnel.

b. Initial Training Requirements. (Refer to Training Matrix, Figure 7-1, and Appendix F)

(1) Category One personnel will complete the following: 24 hours of HM/HW Operator Training (HAZWOPER) or greater and 16 hour Environmental Awareness. The Environmental Awareness training will consist of four sections: HAZCOM, Pollution Prevention, HW Handling and General Awareness.

(2) Category Two personnel will complete the following: 8 hours of First Responder Operations Level Training or greater and 16 hour Environmental Awareness Training.

(3) Category Three personnel will receive at a minimum 8 hours of First Responder Operations Level Training (or greater) and an Environmental Awareness Briefing.

(4) Category Four will receive up to 8 hours of Environmental Awareness Training.

(5) Category Five and Six will receive an Environmental Awareness Briefing and First Responder Awareness Level Briefing.

(6) All personnel will receive a Hazard Communication and Hazardous Materials Briefing on the day they sign into the unit and/or section. All other training must be completed within 3 months of assignment.

c. Sustaining / Refresher Training. (Refer to Training Matrix, Figure 7-1)

(1) Category One personnel will need eight hours of HAZWOPER Refresher Training and two to three hours of Environmental Awareness Training. Note 1: First Responder training is equivalent to 8 Hr of HAZWOPER Training. This is different from the 8-hr HAZWOPER Refresher training. Note 2: Hazard Communication (HAZCOM) training is only required for those personnel who are exposed to Hazardous Materials during the performance of their duties. Note 3: Hazardous Waste (HW) Handling training is only required for those personnel who come into contact with HW during the performance of their duties.

(2) Category Two and Three personnel will complete a First Responder Operations Level refresher course and two hours of Environmental Awareness Training.

(3) Category Four will receive a 4 hr Environmental Awareness Refresher Briefing: HW Handling, Hazard Communication, Hazardous Materials Briefing, and a First Responder (HAZWOPER) Awareness Level refresher brief.

(4) Category Five and Six will receive an Environmental Awareness Refresher Briefing: Hazard Communication, Hazardous Materials Briefing, and a First Responder Awareness Level refresher brief.

(5) All refresher training can be done in increments and must be completed annually.

d. Course Content and availability. See Appendix F for Task, Condition, and Standard.

(1) 24 Hour Hazardous Materials Technician Training.

(a) Content. An individual who successfully completes this course will be able to implement a response plan, use test equipment, select PPE, have a basic knowledge of toxicology and chemical terminology and a working knowledge of risk assessment and prevention.

(b) Availability. This course can be obtained through your local FAST Team, Local Purchase (i.e. Fire Depts. Emergency Response Centers, Colleges/Universities, et.), or any Federal Installation (i.e. Camp Shelby, Memphis Naval Air Station, FT Knox, FT Campbell, Naval and Coast Guard Stations in Mobile, FT. Rucker, FT McPherson, Naval and Coast Guard Stations in Charleston, etc.)

(c) Substitution. The following are authorized Substitutions: 24 Hour On Scene Incident Commander Training, 40 Hazardous Waste Operations Technician.

(2) 8 hour First Responder Operations Level Training.

(a) Content. An individual who successfully completes this course will be able to contain a release but not repair or stop a release, be familiar with risk assessment and HM terms, secure area and prevent further exposure, have basic PPE knowledge, know basic decontamination procedures.

(b) Availability. This course can be obtained through your local FAST Team, Local Purchase (i.e. Fire Depts. Emergency Response Centers, Colleges/Universities, et.), or any Federal Installation (i.e. Camp Shelby, Memphis Naval Air Station, FT Knox, FT Campbell, Naval and Coast Guard Stations in Mobile, FT Rucker, FT McPherson, Naval and Coast Guard Stations in Charleston, etc.)

(c) Substitution. The following are authorized Substitutions: 24 Hour Hazardous Materials Technician Training, 24 Hour On Scene Incident Commander Training, 40 Hazardous Waste Operations Technician.

(3) 16 Hour Environmental Awareness Training.

(a) Content. An individual who successfully completes this course will have knowledge of hazardous waste/material storage, handling, labeling, disposal, manifesting and safety. Will have a working knowledge of environmental issues concerning washracks and oil water separators. Subjects will also cover Hazard Communication, Pollution Prevention, Waste Reduction, Recycling, and an overview of the Army Environmental Program.

(b) Availability. This course can be obtained through your local FAST Team, or any Federal Installation (i.e. Camp Shelby, Memphis Naval Air Station, FT Knox, FT Campbell, Naval and Coast Guard Stations in Mobile, FT Rucker, FT McPherson, Naval and Coast Guard Stations in Charleston, etc.)

(c) Substitution. The Installation Environmental Training and the Unit Environmental Officers Course can substitute. The Army Logistics Management College at FT LEE, VA, offers both of these courses. Class seats can be requested

through ATRRS. Any individual attending this course must notify their local FAST Team upon enrollment and completion of the course.

(4) 8 hour Environmental Awareness Training.

(a) Content. An individual who successfully completes this course will have knowledge of hazardous waste/material storage, handling, labeling, disposal, manifesting, safety, and a working knowledge of environmental issues. Other subjects covered in this training include Hazard Communication, Pollution Prevention, Waste Reduction, Recycling, an overview of the Army Environmental Program, and First Responder Operations Level Training.

(b) Availability. This course can be obtained through your local FAST Team, or any Federal Installation (i.e. Camp Shelby, Memphis Naval Air Station, FT Knox, FT Campbell, Naval and Coast Guard Stations in Mobile, FT Rucker, FT McPherson, Naval and Coast Guard Stations in Charleston, etc.). Most Federal Installations refer to this training as Environmental Coordinator Training or a title to that effect.

(c) Substitution. The following four courses are authorized substitutes: 16 Hour Environmental Awareness Training, the Installation Environmental Training and the Unit Environmental Officers Course can also substitute. Both are offered by The Army Logistics Management College (ALMC) at FT Lee, VA The fourth course is the Facility managers course at FT McCoy, WI Class seats, for the last three courses, can be requested through ATRRS. Any individual attending the ALMC course must notify their local FAST Team upon enrollment and upon completion of the course.

(5) Environmental Awareness Briefing.

(a) Content. Any individual who successfully completes this briefing will have a general awareness of environmental issues. They will know who to must be report to in case of a spill. Subjects will cover at a minimum Hazard Communication, Pollution Prevention, Recycling. There is no minimum time associated with this course. Although one hour is indicated on Figure 7-1, all of the refresher training can probably be completed in two hours, as a rule of thumb. This course can act as the refresher training for all personnel.

(b) Availability. Any individual who has completed any of the above instruction or has been briefed by any individual who had completed the above courses can give this course. Any of the Environmental Correspondence Courses can be used for this class (i.e. ACCP 5700, 5702, and 5704). Videotapes that can be used are "The Unit and the Environment" available through your local TSC and "Every Little Bit Hurts" available through the U.S. Army Environmental Training support center at (205) 722-5816.

(c) Substitution. Any environmental course can substitute for this course.

(6) Additional forms of Sustaining training.

(a) Group two and three can receive refresher training by the use of the video based TSP "Maintenance Operations and the Environment". This video can be obtained through your local Training Support Centers (TSC).

(b) The HAZMAT Refresher Training can be complete by using the Exportable Training Package, " Hazardous Waste Exportable Course and Video". This course can be obtained through the U.S. Army Environmental Training support center by calling the number listed in para 5.b.

(c) Using the Exportable Training Package, "First Responder Exportable Course and Video" can complete the First Responder Operations Level Training. This course can be obtained through the U.S. Army Environmental Training support center. Contact the USACE Professional Development Support Center and request a copy of "The Purple Book" at the following address: Chief, USACE Professional Development Support Center, ATTN: CEHR-P-RG, O. Box 1600, Huntsville, AL 35807-4301 or call the number listed in para 5.b.

(d) All of the First Responder Refresher Training can consist of the videotape, "Six Step Waste Management" put out by the New Pig Corporation. This videotape is mailed out free of charge by calling 1-800 HOT HOGS.

7-3. Documentation

a. Documents. The Environmental Training Record will be used to document Individual training and briefings (See Appendix G). The following items will be used to verify training and support documentation: Certificates of Completion, sign-in sheets or a completed DD Form 1556-1.

b. Record Maintenance. A record of individual training will be maintained in a personnel-training file, maintained by the unit Training Officer/NCO. Facilities will also keep an Environmental Training File. This can be one file that reflects the training of essential personnel in the facility.

c. Retention. The record of an individuals environmental training must be maintained for the time of that individual's service plus 3 years beyond. All environmental training records must accompany the employee at their next duty assignment. Permanent record of all environmental training must be maintained at the facility.

TRAINING MATRIX

CAT	DUTY POSITION	HAZWOPER[1]	HAZ COM[2]	HW HANDLING[3]	AWARENESS	
1	AMSA/ECS/ASF	24 Hr	2 Hr	8 Hr	6 Hr	I
	Shop Foreman	8 Hr	1 Hr	2 Hr	1 Hr	R
2	AMSA/ECS/ASF Technicians	8 Hr[1]	2 Hr	8 Hr	6 Hr	I
	OMS Motor Sergeant (FT)	8 Hr	1 Hr	2 Hr	1 Hr	R
3	Facility Manager (FT)	8 Hr[1]	2 Hr	1 Hr	6 Hr	I
	Facility Coordinator (FT)	8 Hr	1 Hr	1 Hr	1 Hr	R
4	Facility ECO (D)	1 Hr	2 Hr	1 Hr	4 Hr	I
	Unit ECO (D)	1 Hr	1 Hr	1 Hr	1 Hr	R
	Unit HW Coordinator (D)					
5	Facility Commander (D)	1 Hr	1 Hr	0 Hr	1 Hr	I
	Unit Commanders (D)	1 Hr	1 Hr	0 Hr	1 Hr	R
6	Drilling Reservist (D)	0 Hr	1 Hr	1 Hr	1 Hr	I
	full-time Admin Personnel (FT)	0 Hr	1 Hr	1 Hr	1 Hr	R

Figure 7-1 Initial (I) / Refresher (R)

CHAPTER 8
WATER QUALITY

8.1 Purpose

This chapter provides the basic guidance to assist 81st RSC units and facilities in meeting the goals set forth in Army Regulation (AR) 200-1, Chapter 2, Water Resources Management and the Clean Water Act. The intent of these procedures is to reduce the contamination/pollution of drinking water, storm water, and sanitary sewage caused by the activities of the Army Reserve.

8-2. Washracks, Oil/Water Separator, Re-circulation Systems, and Grease Traps

a. The sanitary sewer directs water to a publicly owned treatment works where pollutants are removed before the water is released. The storm sewer channels water (rainwater typically) directly into a body of water like a lake, stream, or river. A storm drain cannot accept any pollutants, since they will eventually find their way to lakes or streams. The sanitary sewer cannot accept pollutants like petroleum, oils, lubricants, solvents, or paint, unless the publicly owned treatment works is prepared to handle such discharges. This is why oil/water separators are installed on our washracks, to remove oil and grease from our sanitary sewer discharge. Washracks, Oil/Water Separators (OWS), and Re-circulation Systems allow us to wash vehicles and military equipment in compliance with U.S. Environmental Protection Agency (EPA), Department of the Army, and local regulations.

b. Oil and Water Separators. OWSs are multi-chambered, gravity fed, underground devices usually located adjacent to washracks. They separate oil from water, enabling water to be discharged to the sewer and oil and grit to be retained in one or more chambers of the oil/water separator. The chambers of an OWS operate under a simple principal, gravity separation of oils and solids from water. When this occurs, it can be removed by decant pipe (allows oil to be drawn off without disturbing the sediment below) or wired into an oil storage chamber. From this chamber, oil is pumped out periodically for disposal. Typical effluent levels are listed in Table 8-1.

Pollutant	**mg/l (ppm)**
Arsenic	0.003
Cyanide	0.040
Lead	0.049
Molybdenum	0.050
Silver	0.005
Zinc	0.175
Cadmium	0.003
Copper	0.060
Mercury	0.0003
Nickel	0.021
Chromium (Total)	0.050
BODs	235
Ammonia (Nitrogen)	30
Total Oil and Grease	100

Table 8-1 Pollutant Effluent Levels

c. Sediment chambers. Some OWSs incorporate a separate sediment removal chamber to remove solid particles. Most washracks either have a sand trap or grit interceptor or sediment/detention pond. In the sediment chamber, rocks, sand and other solid particles are allowed to settle to the bottom of the chamber. It is important that this material is removed periodically, either by a contractor or by our personnel. Sand traps are designed to have the user remove the sand when it reaches the height of the inlet pipe; then, the soil removed from the sediment chamber must be disposed of as contaminated soil. At a minimum, the sand traps should be cleaned annually.

d. Washrack Covers and Curbing. These measures are constructed to prevent storm water from entering the OWS and causing it to overflow. Excessive amounts of water passing through the OWS can clog or impair the OWS, thereby allowing the oil and sediment to enter the sanitary sewer.

e. Re-circulation Systems. Some facilities within the 81st RSC have a different type of system altogether. Re-circulation system removes oil and grease on site so efficiently that the water can be discharged into the storm sewer instead of the sanitary sewer. Some re-circulation systems allow the water to be used repeatedly for washing vehicles. These systems are required when the local POTW does not allow OWSs to connect to the sanitary sewer.

f. Proper Operation of Washracks, OWS and Re-circulation Systems.

(1) Remove and scrape off excessive dirt before washing vehicles or equipment on the washrack. The excess dirt severely affects maintenance and operation of the separator.

(2) Use spray nozzles on all hoses to conserve water and to concentrate the force of water. Do not leave the water running unsupervised into the oil/water separator.

(3) Any covered ILO covers with unusually high amounts of oil, grease, or other oil contaminants should not be washed on washracks, unless the OWS is the oversized cast in place concrete type.

(4) Washing will be limited to military vehicles and other military equipment (i.e. tents, tools, etc.). Kitchen equipment should not be washed on the washrack.

(5) No solvents, petroleum products, detergents or cleaning compounds are to be poured into the washrack, re-circulation system, or OWS under any circumstances.

(6) Equipment wash activities are not to be conducted on open ground or in areas not tied to the separators. If there is any question as to the proper area or methods to perform equipment-cleaning activities contact your supporting FAST Environmental Manager or the environmental division of the Directorate of Public Works (if your center is located on an active installation).

(7) No dumping of hazardous waste or hazardous material into the washrack or OWS is permitted (i.e. waste oil, hydraulic fluid, fuel of any nature, antifreeze, solvents, etc.).

g. Maintenance Requirements.

(1) The washrack area should be kept free of holes or cracks, which will prohibit the flow of water. This may require patching of concrete in the affected areas. All faucets should be operational with no leaking.

(2) If a crack in the cement does appear, submit a 516-E-R to your supporting FAST Facility Management Specialist for repairs.

(3) Do not remove dirt in the wash water collection channels. Simply flush it into the sedimentation basin of the separator.

(4) All separators should be pumped and serviced at least 1 time per year (at a minimum) by service contractors. Facility Coordinators should contact their supporting FAST Facility Management Specialist (FMS) for assistance in locating a vendor. Army Reserve personnel should never enter the OWS chambers. Death could result from toxic gases or oxygen deficient air.

(5) The vendor is responsible to remove sediment from the separators and sediment chambers, clean out the lines and remove oil. An inspection of the inside of the OWS is to be conducted annually in conjunction with pumping and cleaning. Repairs may also be initiated if required.

(6) If the separator ever exhibits a strong odor of any flammable material, it is strongly recommended that you immediately call your supporting FAST FMS. Discontinue use of the washrack until a determination is made on the safe use of the washrack.

(7) Facility Coordinators or full-time maintenance personnel must ensure that all work is performed to standard. They will inspect the washrack and OWS quarterly to ensure it is in serviceable condition. If an inspection reveals that OWS cannot function properly, close the washrack and notify your FAST Environmental Manager of the problem. A maintenance log will be maintained for all work performed on the washrack and OWS. Using the Washrack and OWS Maintenance Log. The log should be kept for in the ERB.

h. Inspection of Washracks and Oil/Water Separators.

(1) All oil/water separators will be inspected quarterly. Maintenance personnel or the Facility Coordinator is responsible for monitoring the condition of the separators. Insect the following items.

(a) Check faucets for leaks.

(b) Check concrete slab for cracks. Cracks more than one-eighth inch requires repair.

(c) Check the fluid level of the OWS. Some washracks have a high float alarm and warning light. These must be tested for correct operation to ensure the OWS does not become over filled. Check the gauge on OWS that do not have a high float alarm.

(d) Inspect curbing for cracks or missing pieces.

(e) Remove grates from the sedimentation basin and inspect the silt level. Remove trash or other debris that may have entered the silt trap. Ensure silt or other debris does not block the pipe to OWS.

(f) If the OWS has a lift station or submersible pump to move wastewater to the sewer line, inspect these for proper operation. The washrack cannot be used if these items fail to operate correctly. Ensure the warning light and alarm is tested for correct operation.

(2) During inspections, if evidence of unacceptable activities is discovered, a written report will be submitted to the Facility Commander and the supporting FAST Environmental Manager.

(3) The Facility Commander is responsible to ensure corrective action is taken.

i. Prohibited Practices.

(1) No dumping of oil, fuel, hydraulic fluid antifreeze, solvents or chemicals directly into washracks or oil/water separators.

(2) Wash water must not be discharged into storm drains.

(3) Dilution of antifreeze and discharging to the sanitary sewer is forbidden in the 81st RSC.

(4) Soap should NEVER be used at a washrack where soap will be flowing through an oil/water separator.

(5) Personnel working around separators permit no smoking.

(6) Do not store POL or hazardous substances on washracks. This includes fuel pods, fuel cans, antifreeze containers, etc.

(7) Never store equipment or park vehicles on washracks except during washing operations.

(8) Leaking water hydrants that discharge into washracks and into oil/water separator should be replaced.

(9) Never cover Oil/Water Separator openings with equipment (NO ACCESS).

j. Grease Traps. It is important to maintain and empty grease traps. Grease traps are somewhat similar to OWSs in that they separate grease from kitchen wastewater before it enters the sanitary sewer. If a kitchen is required to have a grease trap, then ensure that it is periodically cleaned out, because if it becomes clogged, it will cease to function properly.

8-3. Storm Water

a. Purpose. The ultimate goal of storm water permits is preventing pollution from entering the waters of the U.S. because of storm water runoff.

b. Applicability. Storm Water permits are required for any Army Reserve facility with tactical vehicle motor pools and/or supporting vehicle maintenance activity centers. (Water Docket MC-4101). This is currently defined by USARC as ECSs, AMSAs, and ASFs.

c. Permit Compliance. Permit compliance means taking those actions that are needed to fulfill the permit conditions. All permits require the development and implementation of a site specific storm water pollution prevention plan. The plan describes the management methods the facility will use to prevent source materials from coming into contact with storm water. It also identifies the persons responsible for implementing the storm water management methods.

d. Unlawful Discharge. It is unlawful to discharge any pollutant that does not comply with the applicable permit requirement as identified on each facilities permit.

e. Spills. When a spill occurs with hazardous substances in amounts greater than or equal to the reportable quantities specified in 40 CFR 117 or 40 CFR 302, during a 24 hour period, most permits will require you to take the following actions:

(1) Notify the National Response Center (1-800-424-8802) and your designated state environmental agency as soon as possible. If on an installation, contact the DPW Environmental Division immediately. Official notification of spills must be within 24 hours.

(2) Modify your SWP3 within 14 days of knowledge of the release, as outlined in your permit.

(3) Submit written details of the release to the 81st RSC and your state regulator within 14 days, as outlined in your permit. (Note: if you are unsure if the substance is greater than the

reportable quantity contact your FAST Environmental Manager.)

f. Leaks. Every facility must place a drip pan under leaking vehicles (drip pans can be ordered using the NSN at Appendix E). This applies to all facilities, whether permitted or not.

g. Operational or facility changes. If you have changes in facility operations or major construction most permits will require you to provide your state regulatory agency with prior written notification with a description of the changes.

h. Inspection. If national security will not be compromised, the permitted facility will allow EPA, state, or regional representatives to examine records and inspect facility and monitoring equipment.

8-4. Safe Drinking Water

a. Purpose. The purpose of this section is to provide U.S. Army Installations with guidance on meeting the requirements pursuant to the Safe Drinking Water Act and AR 200-1, chapter 2.

b. US Army Reserve Centers should have their drinking water tested every three years to ensure it is safe for consumption. However, the condition of the water is the responsibility of the Public Water System or Army Installation that provides the water to the facility. The record of this test should be maintained on file for three years. If your records indicate that your facility has not been tested within three years, contact your local drinking water provider using the letterform at found in Figure 8-1. If you fail to receive a response from your water utility, contact your area FAST Environmental Manager.

c. A record of all correspondence between the facility and the Water Company should be maintained in the facility permanent files.

d. If you suspect a problem exists with your drinking water, contact your area FAST Environmental Manager for assistance.

e. If your facility gets its water from a well, then there may be special requirements for monitoring the drinking water quality and well water quality in addition to requirements for testing the water supply. Contact your area FAST Environmental Manager for further guidance.

Date

Your Water Utility
Address
City, State, Zip

SUBJECT: Drinking Water Quality

Dear Sir,

Army regulations require that each Army Reserve facility's drinking water be tested every three years to ensure that it is safe for human consumption. We request that you test the water at ***Your Facility Name, Address*** in accordance with the Safe Drinking Water Act.

Do not hesitate to call should you have any questions pertaining to the report. The point of contact for this action is ***Your Name***, ***Your Phone Number***. Thank you for your cooperation.

Sincerely,

Your Name

Your Title

Figure 8-1

CHAPTER 9
AIR QUALITY

9-1. Purpose

a. This chapter provides the basic guidance to assist 81st RSC units and facilities in meeting the goals set out in AR 200-1, Chapter 6, and Air Program.

b. This guidance does not address all the regulatory requirements that a unit or facility might be subject to under Federal, state or local rules. Therefore, it is essential for 81st RSC Environmental Division Staff to consult with regulators and other technical assistance sources for current compliance requirements and guidance.

9-2. Air Pollution Emissions Inventory

a. An air pollution emissions inventory identifies all the stationary sources of air pollution on an installation or Civil Works facility, permitted and unpermitted, and the type and amount of emissions from those sources. Inventories may also include mobile sources.

b. Federal requirements. The Clean Air Act requires sources within ozone non-attainment areas to produce an air pollution emissions inventory of certain pollutants. For the purposes of this requirement, the term "source" includes all air pollution emission points at the installation within the fence line.

c. State requirements. Individual states are responsible for the implementation of the Clean Air Act emission inventory requirements. Many states have developed emissions reporting requirements for non-attainment areas. In addition, some states have established requirements for attainment areas.

d. The RSC Environmental Division Staff should be consulted regarding applicability and procedures to meet these requirements within the 81st RSC facilities. Communication with federal and state agencies should be maintained by the Environmental Staff to determine requirements.

e. Army requirements. The Army requires that all military installations, regardless of attainment classification, produce an air emission inventory for installation planning purposes. This inventory should identify all the stationary sources of air pollution on the installation and the type and amount of emissions from those sources. The 81st RSC Environmental Division will determine which facilities within the RSC require air emission inventories and issue guidance to that effect. Prepare a statement that your facility does not require an air emission survey using the example provided at Figure 9-1.

9-3. Ozone Depleting Substances (ODSs) or Ozone Depleting Chemicals (ODCs)

a. ODSs are chemicals that contribute to the deterioration of the ozone in the upper atmosphere of the earth. Loss of upper atmosphere ozone allows an increase in the amount of ultraviolet radiation that reaches the surface of the earth. This, in turn causes an increase in the incidence of skin cancer, crop damage, and other negative health and environmental effects.

b. The chemicals that contribute to this problem include chlorofluorocarbons and halons. A complete list of regulated ODS chemicals can be found in 40 CFR 82, Appendix B and Glossary.

c. Recent regulations established limits in production and use of these chemicals. As production is phased out over the next several years, the availability of ODSs will diminish and the cost will increase.

d. Major requirements of the Clean Air Act, which may affect installation activities, include the following:

(1) Venting any ODS to the atmosphere in relation to repair, maintenance, or disposal activities are prohibited.

(2) Certified recovery and recycling equipment must be used to capture ODSs during servicing or disposal of air conditioning or refrigeration units.

(3) Personnel who maintain, repair, dispose, or reclaim air conditioning or refrigeration equipment which contains ODSs must be certified.

(4) Sale of ODS refrigerants is restricted to certified technicians.

e. DOD has issued additional mandates and guidance to minimize emissions of ODSs.

(1) DOD Directive 6050.9, Chlorofluorocarbons and Halons, 13 February 1989.

(2) More recently, the Secretary of Defense issued a memorandum, Ozone Depleting Chemicals, 20 May 1993, which implements Executive Order 12843 and Public Law 102484, National Defense Authorization Act for Fiscal year 1993. These mandates prohibit the required use of ODSs in contracts without certain procedures being followed and approvals being obtained.

(3) Army Acquisition Executive establishes the procedures Memorandum, 20 May 1993, subject Elimination of Ozone Depleting Chemicals: Implementation of the Requirements of the National Defense Authorization Act for Fiscal Year 1993. The procedures include extensive review of potential substitutes for ODSs and approval of ODS use at the general officer or senior executive service level.

9-4. Asbestos Management

a. The Asbestos Management Program was developed to protect both workers and the environment from exposure to dangerous asbestos particles. Current laws address occupational exposure and acceptable levels of exposure to asbestos and other asbestos-like material. For further information, refer to AR 200-1, Chapter 8.

b. There are three forms of asbestos that are typically found in Army Reserve buildings:

(1) Sprayed or trawled-on surfacing material

(2) Insulation on pipes and boilers

(3) Miscellaneous forms such as wallboard, roofing material, and ceiling/floor tiles.

c. The asbestos is then further identified as friable or non-friable.

(1) Friable Asbestos is defined as any asbestos that when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Only friable asbestos pose immediate health problems. Friable asbestos can usually be found on ceiling tiles or insulation around boilers and pipes. If you suspect you have friable asbestos, notify your area Environmental FAST.

(2) Non-friable Asbestos is only dangerous when it is being broken where the asbestos particles become airborne. Usually this only happens during repairs or constructions. Non-friable asbestos can usually be found in walls and floor tiles. Non-friable asbestos does not have to be immediately removed. If for some reason a known non-friable asbestos material is

accidentally damaged, you need to contact your area Environmental FAST or the RSC Environmental Office immediately.

d. Asbestos Survey. Each Government owned facility should have a current Asbestos Hazard Emergency Response Act (AHERA) based Asbestos Survey on hand. The 81st RSC Policy is that it is the responsibility of the building owner to provide an asbestos survey for leased facilities. You should have a copy of the survey on file.

e. Each Asbestos Survey should include the following (at a minimum):

(1) Summary of on-site survey activities

(2) Description of type of material (i.e., pipe insulation, wall board, etc.)

(3) Lab results (using layering techniques)

(4) Friable or non-friable status

(5) Physical condition and fiber release

(6) Estimates of quantity or measurements of amounts of suspect Asbestos Containing Material.

(7) Layout of the building indications where each sample was taken. Sample location must correspond with the lab analysis results.

(8) Layout of the building indicating where each type of Asbestos Containing Material is located.

(9) Contractor's Asbestos Inspector certification and signatures of Alabama Health Environmental Division accredited inspectors with accreditation numbers

(10) Laboratory analysis certification

(11) Photographs of sample points (optional)

(12) Recommendations for corrective actions

f. If a facility does not have a recent (dated after 1992) asbestos survey on hand, then contact your area FAST to arrange for an AHERA certified contractor to conduct an Asbestos Survey. (This requirement may be examined on a case-by-case basis.)

g. Asbestos Operations and Maintenance (O & M) Plan. If asbestos containing material has been identified at your facility, you should have an O & M Plan. The purpose of the O & M plan is to provide written work practices to maintain asbestos in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling asbestos disturbance and/or damage. This should be contracted to an Asbestos Hazard Emergency Response Act certified Asbestos Containing Material Management/Planner.

h. At a minimum the O & M Plan should include:

(1) Notification and labeling procedures

(2) Training requirements under OSHA (not Asbestos Hazard Emergency Response Act) for all levels

(3) Employee protection program

(4) Maintenance/Renovation permit system

(5) Special work practices for maintenance activities

(6) Special work practices for renovation activities

(7) Emergency response procedures and National Emission Standards for Hazardous Air Pollutants reporting procedures

(8) Periodic ACM surveillance and record keeping requirements

(9) Re-Inspection schedule

i. The facility manager will use the O & M Plan to inform custodial personnel, maintenance personnel, and other vendors/contractors of hazards that may be encountered to include contact with Asbestos Containing Material. The facility managers will ensure that any vendor fitting the aforementioned criteria will read the facility O & M Plan. The facility manager will have the vendor sign the work authorization form to document that the vendor has been informed of any potential Asbestos Containing Material hazards (Figure 9-2).

j. Labeling of Asbestos Containing Material. Each facility identified as having Asbestos Containing Material must have appropriate caution labels on each homogenous Asbestos Containing Material area. This caution label must be conspicuously located in the area of the Asbestos Containing Material. The label must clearly state that there is asbestos containing material within this area, and that asbestos is a cancer causing substance.

k. It is the responsibility of the RSC to establish priorities for asbestos remediation for all its facilities.

9-5. Radon

a. Radon is a colorless and odorless gas released by the natural degradation of uranium. Radon can be found in high concentrations in soils and rocks containing uranium, granite, shale and phosphate. The only known health effect associated with exposure to elevated levels of radon is an increased risk of developing lung cancer. The risk of developing lung cancer from exposure to radon depends upon the concentration and the duration of exposure. Current evidence also suggests smokers are at higher risk from radon exposures than non-smokers are.

b. Radon naturally occurs in outdoor air concentrations of 1 picocurie per liter (pCi/L), with typical concentrations of about 0.5 pCi/L. Although these levels are not considered to be of concern, radon can concentrate inside enclosed spaces to levels exceeding several hundred pCi/L. Radon gas can enter typical buildings through dirt floors, cracks in concrete floors and walls, floor drains, sumps, joints and tiny cracks or pores in hollow-block walls.

c. All Army Reserve Facilities (owned or leased) are required to perform radon measurements in order to identify those structures with radon levels above 4.0 pCi/L. Emphasis will be on identifying and remediating structures with levels greater than 20 pCi/L. Your building should maintain a copy of your radon results in your environmental files. If your radon results are missing, contact your FAST Environmental Manager for assistance.

AIR EMISSION EXAMPLE

AFRC-CAL-ENV (200) 26 April 1998

MEMORANDUM FOR Commander, Your Facility and Address

SUBJECT: Air Pollution Emission Inventory

1. The 81st RSC Environmental Division has conducted an inventory at ***Your Facility and Address*** to identify sources of air pollution emissions. No stationary or mobile air pollution sources were identified at this facility.

2. This memorandum should be used to avoid negative ECAAR findings as it relates to Air Quality. The point of contact for this action is ***Your Environmental FAST and Phone Number***.

PAUL SMITH
COL, GS, USAR
Deputy Chief of Staff, Engineers

Figure 9-1

Maintenance Work Authorization Form
Asbestos Containing Material Briefing

No. _____

Authorization
Authorization is granted to proceed with work in this USAR Facility as described below:

Presence of Asbestos Containing Material

_____ Asbestos Containing Material is not present near the maintenance work area.

_____ Asbestos Containing Material is present, but its disturbance is not anticipated; however, if conditions change or if the nature of the work changes, the Asbestos Program Manager will re-evaluate the work before continuing the work. Location(s) of Asbestos Containing Material was communicated to all personnel involved in the work.

_____ Asbestos Containing Material is present and may be disturbed.

Work Practices (if Asbestos Containing Material is present)
The following work practices shall be employed to avoid or minimize disturbing asbestos:

Personal Protection (if Asbestos Containing Material is present)
The following personal protective equipment shall be used during the work to protect personnel:

Special Requirements/Instructions
The following are special practices and/or equipment required to perform the work as stated above:

Signatures
I have received a briefing on the presence of Asbestos Containing Material in this facility, and I understand the terms of this work:

Signature _____ Date _____
Maintenance/Contractor Representative

Signature _____ Date _____
Facility Manager

Figure 9-2

Chapter 10
Indoor Firing Ranges

10-1. Purpose

a. The purpose of this chapter is to provide guidance to minimize the environmental exposure of lead and to provide guidance for proper cleaning and removal of lead.

b. Indoor Firing Ranges can be classified as one of the following 3 categories:

(1) Converted - firing range has been renovated and is being utilized for another purpose other than a firing range (i.e. storage or classroom). Before converting a range, all interior surfaces and the exhaust ventilation system must be decontaminated of lead residue to current OSHA standards and be inspected by a Certified Industrial Hygienist. If a space has been renovated and converted to an alternate use, then it is considered completely converted. This conversion will take 3 steps: cleanup, removal or encapsulation of all uncleanable surfaces and lead contaminated debris, and then renovation/conversion. If a space is converted before it has been properly cleaned, then it has not been permanently closed. If your firing range is currently being used for something other than a firing range, and it has not been properly converted, then contact your area FAST Environmental Manager.

(2) Closed - permanently closed range. Most ranges fall into this category.

(a) All ranges that are being closed must be tested to ensure that lead levels are below federal and state standards. However, permanent closure is NOT a clean bill of health. In fact, ranges that have been permanently closed often have various unsafe areas. For instance, the backstop invariably proves to be uncleanable. As an uncleanable surface, it has lead impacted upon it that will forever continue to be unsafe. Access to the backstop should therefore be restricted, either by erecting a barrier (encapsulation) such as a wall or by painting or coating the backstop in an approved encapsulate. However, the preferred methods for handling backstops are the complete removal of the backstop and a complete conversion of the area altogether.

(b) Temporary closure vs. permanent closure. An indoor firing range that has been temporarily closed but not cleaned is still active, until it has been cleaned. After proper cleaning / encapsulation / enclosure, the range may be designated as permanently closed, after which it will no longer be used for weapons firing.

(3) Open/Active - presently being used as a range. If you have an open/active range you should contact the 81st RSC Safety office to assist you in developing a firing range ENVIRONMENTAL HANDBOOK for guidance in the daily operation and to ensure compliance with federal, state, and local regulations. Active ranges produce lead dust, which will require a contractor to clean the range annually and replace the air filters.

10-2. Operational Procedures

a. When operating an active range, it is important that every possible precaution be taken to reduce exposure to lead dust. This includes providing a clean surface on which to lie or kneel when a soldier is firing. It also includes mandatory soap and water washing of both hands and face after firing. This is NOT an environmental funding requirement. It must be funded by the unit's operational funding source.

b. The most important requirement for the operation of ranges is a High Efficiency Particulate Air Vacuum. It must be used after every firing, and it must be used on EVERY surface in the range. Most ranges need a minimum of 2 High Efficiency Particulate Air Vacuums in order to perform this task satisfactorily. The purchase of High Efficiency Particulate Air Vacuums may be funded by environmental dollars. However, the purchase of High Efficiency Particulate Air Vacuums is the only operational expense that can possibly be reimbursed by VENC funding. Note: Any personnel who perform High Efficiency Particulate Air Vacuum operations must contact the 81st RSC Safety Office for approved procedures and for information on medical monitoring scheduling.

c. Firing Ranges must be certified as clean each year with a thorough cleaning of all surface areas in the range. Environmental will NOT fund this annual cleaning. It must be funded as an operational cost of the range.

d. Every range must also have an annual air-monitoring sample taken and analyzed by a Certified Industrial Hygienist. Environmental will NOT fund this annual testing. It must be funded as an operational cost of the range. The permissible exposure limit for lead is 50.0 $\mu g/m^3$. The housing urban development action level for lead dust in air is 30.0 $\mu g/m^3$. Anything above 30.0 $\mu g/m^3$ should be considered dangerous to pregnant women (and children). For all other personnel, 50.0 $\mu g/m^3$ is the action level.

e. Another important requirement is documentation of cleaning and certification. Records of lead testing and environmental clean up must be kept on file at the facility.

10-3. Lead Hazards

a. Lead is an element that accumulates in an organism over a lifetime, and if left untreated, can cause serious health effects. Lead is absorbed into the body by inhalation or ingestion. Because the amount of lead is calculated as a percentage of body weight, children and fetuses are much more susceptible to the harmful effects of lead. Therefore, the focus of most precautions taken against lead is targeted at these two groups.

b. The federal government as a health hazard has identified lead. Under no circumstances should a range be used for food storage or as a mess hall, unless the space has been completely cleaned has been associated with children and pregnant women, either through ingestion or breathing. Hand-to-mouth is the number one route of lead entry into the body. Lead dust is not normally a breathing hazard, because lead is such a heavy element, but if a broom is used to sweep an indoor firing range, then lead dust can become airborne. Therefore, do NOT sweep ranges. Only a HEPA vacuum should be used on indoor firing range floors and walls.

c. The permissible exposure limit for lead in air is 50.0 $\mu g/m^3$. The housing urban development action level for lead dust in air is 30.0 $\mu g/m^3$.

d. Lead contaminated debris is considered hazardous waste if it contains lead in excess of 1.0 milligram per square centimeter or 0.5% by weight.

e. Lead dust at levels greater than 100 $\mu g/ft^2$ are considered above the action level for lead dust for all vertical surfaces. Lead dust at levels greater than 200 $\mu g/ft^2$ are considered above the action level for lead dust for all horizontal surfaces

CHAPTER 11
ENVIRONMENTAL PROGRAM MANAGEMENT

11.1 PURPOSE

This chapter applies to the management of all environmental programs to include budgeting and financing of environmentally related projects. Environmental Program Management also outlines external and internal environmental assessments. Additionally, this chapter addresses environmental non-compliance actions taken by federal, state, and local governments.

11-2. Environmental Quality Control Committee (EQCC)

a. The EQCC's purpose is to foster comprehensive policies and procedures, which will preserve, protect and enhance the environment within the RSC. Provide advice and recommendations to the Commander concerning all media of the Environmental Quality.

b. By serving as a policy making body, the EQCC advises the Commanding General on decisions related to environmental policies, strategies and programs that will effect our customers in the eight state region. In addition, the EQCC acts as a forum for information exchange among the general staff, the environmental managers, and other essential personnel within the RSC.

(1) The EQCC is authorized by paragraph 15-11, AR 200-1 "Environmental Protection and Enhancement", dated 21 February 1997. It serves as a non-regulatory body that acts on a broad range of environmental issues affecting the soldiers and unit commanders in the RSC.

(2) AR 200-1 specifies that the EQCC will be chaired by the RSC Commanding General with the Command Executive Officer acting as the Alternate Chairman. The Deputy Chief of Staff Engineer is to act as an Executive Secretary. The balance of the committee includes the following:

(a) The director of each RSC staff section or their alternate.

(b) Special staff officers of the Public Affairs Office, Safety and the Judge Advocate General.

(c) A representative from each of the Direct Reporting Commands and the Major Subordinate Commands.

(d) The RSC environmental staff and each of the FAST Environmental Managers

c. The EQCC will solicit environmental issues from the members/commands to study and provide guidance to the unit commanders so that more informed environmental decisions could be made and disseminated to the individual soldier.

d. Each center will make environmental considerations a functional requirement of their respective centerboard agenda. This is not just a vehicle for disseminating environmental decisions and policies from the RSC's EQCC, but to act as a response mechanism to the RSC's EQCC. Each Reserve centerboard, with the help of the senior military commander at each facility, will adapt their program format similar to that of the EQCC. The commander will act as the Chairperson in these proceedings and the facility manager will serve as the executive secretary.

11-3. Pollution Prevention

a. On August 3, 1993, President Clinton signed Executive Order 12856, Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements". The President signed Executive Order 12856 to challenge the Federal government to become a leader in pollution prevention and to be a good neighbor by providing local and state authorities with information concerning Federal government use of toxic and hazardous chemicals and extremely hazardous substances. On December 10, 1993, The Under Secretary of Defense for Acquisition and Technology signed a memorandum outlining the following: (1) states the Department's complete support for Executive Order 12856, (2) provides a policy statement on Executive Order 12856, and (3) set deadlines and assigns responsibilities to DOD Components and individual facilities to meet the requirements of Executive Order 12856.

b. In general, DOD component pollution prevention efforts must recognize the environmental management hierarchy established in the Pollution Prevention Act of 1990.

c. The hierarchy of pollution prevention is as follows:

(1) Pollution should be prevented or reduced at the source.

(2) Pollution that cannot be prevented should be recycled in an environmentally safe manner

(3) Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner.

(4) Disposal or other controlled release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

11-4. Recycling

a. The policy of the 81st RSC is to recycle white paper and aluminum cans, even if the local government does not have an organized recycling program. Local vendors will usually pick up such commodities as white paper and aluminum cans at no cost. Even more preferable would be a program that returned money or supplies for the recycling of white paper. Since white paper was originally purchased by the USAR, the funds received for its recycling cannot be used for any discretionary or non-appropriated funds, i.e. Family Support Group, Heart and Flower fund, etc. Each quarter, include the estimate for recycling on the Quarterly Recycling Report Form 5R. This form can be located at the end of this publication.

b. In some of our remote facilities, recycling may require carrying the white paper and aluminum cans to either a local recycler or the nearest support installation. The Deputy Chief of Staff Engineer can

Be applied to your Family Support Group or similar unit funds. As long as the USAR did not purchase the items recycled, the money recovered by the recycling can be deposited into the unit fund, hearts/flower fund, or Family Support Groups.

(1) For some facilities such as National Guard facilities or unmanned facilities, it may not be possible to have a recycling program, but for 95% of the RSC facilities, it is not unduly burdensome to "Do the right thing".

(2) Remember that we are striving to set an example as stewards of the environment.

c. The Environmental Division will support other recycling initiatives in support of the pollution prevention program, if justifiable. Submit recycling ideas to your FAST Environmental Manager.

d. If the local government has an organized program for recycling, your USAR facility is required to participate. Of course, if your facility does not generate that type of recyclable material, then your facility cannot participate, but if your

facility does generate the recyclable material, then you must collect the waste and segregate it properly

11-5. Toxic Substances Control Act (PCBs)

a. The Toxic Substance Control Act regulates and controls harmful chemicals and toxic substances in commercial use. Toxic Substance Control Act applies to the regulation of Polychlorinated Biphenyl's (PCBs). PCBs for the most part are regulated as a hazardous waste

b. The most likely places for PCBs to be found are in the following systems: ballasts, transformers, capacitors, heat transfer systems, hydraulic systems, electromagnets, switches, and voltage regulators, circuit breakers, and cables. Primarily, most PCBs are found in transformers at reserve centers. If PCB containing, the transformer should be labeled. With a sticker similar to Figure 11-1 and this label should be visible at ground level.

c. Federal PCB regulations require equipment-containing PCBs to be labeled inspected and any leaks detected must be corrected while in service.

d. RSC facility managers should contact the local Power Company to determine if any transformers on RSC property contain PCBs. An example of a letter to send to the owner of the transformer is provided at Figure 11-2. If the transformer does contain PCBs, you need to request in writing that the Power Company identifies which ones contain PCBs and label them as such. In addition, the transformers should be inspected to ensure no leaks occur, and if you notice a leak in a transformer, contact your power company immediately. Contact the FAST Environmental Manager if the Power Company does not react within three days.

e. A record of all correspondence between the facility and the Power Company should be maintained in your permanentfiles

11-6. Historic Preservation

a. In 1966, Congress passed the National Historic Preservation Act to help prevent the loss of irreplaceable historic properties. The Act created the Advisory Council on Historic Preservation to advise the President and Congress on matters involving historic, archeological and cultural preservation. The Council is authorized to review and comment on all Federal undertakings that may have an effect upon properties either listed in the National Register of Historic Places or are eligible for such listing. Structures 50 years of age or older are potentially eligible for listing in the National Register of Historic Places.

b. As a Federal Facility Manager, if your facility is listed on the National Register of Historic Places or is included within a historic district, all undertakings that may have an effect on the historic property must be submitted to the appropriate State Historic Preservation Officer for comment. Completion of a review (called the 106 Process) may be indicated by adoption of a Memorandum of Agreement or a letter from the U.S. Army Reserve to the Advisory Council on Historic Preservation notifying its comments have been given consideration. Failure to complete the review process can result in litigation forcing the manager to stop a project until the review is complete. Only upon completion of the review can the historic property be treated as dictated by a Memorandum of Agreement.

11-7. Radioactive Material

a. Storage. Equipment containing radioactive material should be stored in a container that contains a radioactive placard. The placard should be used on any containers, cage doors and main door into the area.

b. Waste. All damaged/expired Radioactive Equipment and substances will be turned into the closest Federal Military Installation. Coordination should be made with the Installation Radiation Safety Officer. The Radiation Safety Officer is normally located with the installation safety office. Documentation will vary from post to post (see state addendum) and from item to item.

c. Specific guidance on each item can be obtained through Rock Island Arsenal. Rock Island is the Army Proponent for Radioactive Material and Disposal. Each specific item has a given Item Manager. For example, the M8A1 Item manager is Jeff Havner and Tim Mohs at 309-782-2965. For any other item, contact Mike Styvart at 309-782-0880.

d. Miscellaneous items. Commercial items such as smoke detectors that contain small elements of radioactive isotopes have no regulatory requirement for turn-in. However, the Army Good Neighbor Policy requires that we turn in these items through the local Radiation Safety Officer.

11-8. ECAS Internal / External Assessments

a. Definition: ECAS was established by the Department of the Army and was designed to ensure Army Reserve Centers are in compliance with all Federal, state and local environmental laws. The Environmental Compliance Assessment Army Reserve accomplished this with two types of environmental assessments, an external and an internal environmental assessment.

b. External Assessments

(1) The 416th Engineer Command Teams perform external assessments at least once every 4 years.

(2) The 416th Engineer Command Team will make a site visit to the reserve facility and assess aspects of all environmental laws using a standardized Environmental Compliance Assessment Army Reserve manual.

(3) They will compile a report from their site visit.

(4) Based on the team's findings, the FAST Environmental Manager will develop a corrective action management plan for each deficiency. The corrective action management plan is updated annually with the submission of the EPR Report.

c. Internal Assessments

(1) Internal Assessments will be conducted in accordance with the 81st RSC Internal Compliance Assessment Policy in Appendix H.

(2) An RSC representative performs internal Assessments. Generally, your FAST Environmental Manager will perform Internal Assessments, and they are performed 2 years after external assessments.

(3) Using the Facility Environmental Checklist (Appendix H) does internal Assessments. This completed form will be given to the facility immediately after the site visit has been completed.

(4) Internal Assessments ensure that the corrective actions have been implemented. Both external and internal assessment reports should be kept on file at both the RSC and the facility for 4 years.

11-9. Federal Insecticide, Fungicide, and Rodenticide Act/Pesticides

a. Federal Insecticide, Fungicide, and Rodenticide Act was enacted to regulate the registration of new pesticides and for their re-registration to ensure that when used according to label directions, they will not present any unreasonable risks to human health or the environment. Federal Insecticide, Fungicide, and Rodenticide Act applies to persons who manufacture, market, formulate, distribute, use or dispose of pesticides and pesticide containers.

b. The RSC contracts out all Federal Insecticide, Fungicide, and Rodenticide Act activities (i.e. pesticide contracts). These pesticide companies should be licensed with the EPA, which will be verified by the contracting office servicing the RSC. The contractor should provide the facility with an annual report indicating the type and amount of pesticides applied during that year. This report should be maintained on file with a copy provided to the RSC. Prepare a statement using the example at Figure 11-3, and maintain this statement in your environmental files permanently.

c. RSC personnel are not authorized to use, store or dispose of pesticide, fungicide or rodenticide.

11-10. National Environmental Policy Act (NEPA)

a. NEPA establishes policy, sets goals and provides means for carrying out the policy of using all practicable means to promote the general welfare through the Army and Army Reserve's considered and intelligent use of the environment. AR 200-2, "Environmental Effects of Army Actions", dated 23 December 1988, requires the Army to consider the effects of its actions on the environment. It requires the Army to integrate environmental consideration into the decision-making process.

b. NEPA requires Federal agencies to incorporate into their planning and decision-making an analysis of the effects (if any) that proposed actions would have on the environment and the possibilities for mitigating or avoiding completely any adverse environmental effects.

(1) If your unit plans to train on a military installation, then the Unit Administrator should contact that military installation's Range Control, Environmental Office or Natural Resource Office. They will tell you of any environmental consideration requirements necessary. In addition:

(a) Integrate environmental requirements into the planning / decision-making process.

(b) Include an environmental Annex to your operations order.

(c) Brief all personnel involved in the training about environmental concerns before the training event. The briefing should include actions addressed at Appendix G:

(2) If your unit plans to train on federally or state-owned land or on privately owned land, coordinate with the FAST Environmental Manager. At a minimum, you will need to prepare a Unit Training Environmental Consideration Checklist (See Section 1 of Appendix G).

(3) Record of Environmental Consideration

(a) A Record of Environmental Consideration indicates that the government has considered the impacts of its action/activity/decision on the environment. From the Record of Environmental Consideration, the 81st RSC will either decide that the activity should be categorically excluded from further study or that the activity warrants further study. After you prepare a Unit Training Environmental Consideration Checklist (See Appendix G), the RSC Environmental Division will send you a completed Record of Environmental Consideration for your files.

(b) If further study is required, then it will probably be in the form of an environmental assessment. Coordinate with your FAST environmental manager to track the development of an environmental assessment. An environmental assessment cannot be done at the facility level, and an environmental assessment normally takes approximately six months to develop and complete. Examples of actions that would require an environmental assessment are: buying or selling Army Reserve property, building a new USAR facility, training on environmentally sensitive lands, or any activity that affects historically significant property.

(4) Environmental Baseline Study

(a) An Environmental Baseline Study is a document that screens facilities for possible contamination caused by the activities of the Army Reserve. An Environmental Baseline Study is a required document for any kind of real property transfers or leases renewal.

(b) The RSC Environmental staff will conduct all Environmental Baseline Study.

(c). Construction projects also require environmental consideration; however, this environmental documentation is administered at the RSC level.

11-11. Environmental Noise

a. The purpose for this section is to minimize the environmental noise of actions resulting from Army Reserve activities through administrative and operational controls. This section also describes procedures for responding to noise complaints.

b. Noise Abatement. It is the responsibility of the Facility Commander and all Commanders to consider the effects of noise on the local community. This includes churches, schools, and hospitals as well as residential areas. For all such neighbors within 500 meters of the property line of an Army Reserve facility, noise abatement and consideration for noise impacts will be integrated into the decision-making process. In other words, think about your neighbors when planning training at your facility.

c. Environmental Noise Management Plan

(1) All Army Reserve facilities with significant noise sources (airfield, range, or industrial operations) will receive a noise survey subject to availability of funds.

(2) If schools, churches or medical facilities are located within 500 meters of the property line of the facility, then a

noise assessment will be funded. Contact your FAST Environmental Manager in order to determine whether a noise survey is required.

(3) If the facility has aircraft, ranges or equipment that exceeds EPA noise emission standards, then a noise survey must be prepared and funded.

(4) A facility whose primary mission is the production, maintenance, or rehabilitating of military materiel may also require a noise assessment. For example, an AMSA or ECS may require such assessments. However, in the case of a shop located on an installation, the facility will be covered by the installation Environmental Noise Management Plan.

d. Noise Complaints.

(1) Inevitably, noise complaints will occur. In these instances, it is essential that command response be considerate, forthcoming, and official. Investigate and respond to complaints immediately. All noise complaints will be treated in the following manner:

(a) Document each noise complaint by maintaining a log. The log will include, at a minimum, the following information: date, time, person filing complaint, the noise responsible for the complaint, the person who accepts the complaint, and actions taken to correct the deficiency.

(b) The command will take immediate action and investigate the noise source. Determine whether all noise reduction techniques were utilized. Determine if the problem was the result of the proximity of the noise generation to the complainant. Then, prepare a response for the individual, which details the noise complaint circumstances and the corrective action taken.

(2) Format for the Noise Complaint Report may be found at Figure 11-4.

(3) Contact the FAST Environmental Manager if an individual complains repeatedly about noise created by the facility.

CAUTION

CONTAINS

PCBs

(POLYCHLORINATED BIPHENYL'S)

A toxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761 - For disposal information contact the nearest U.S. EPA Office

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In case of accident or spill, call toll free the U.S. Coast Guard National Response Center at
1-800-424-8802

Also Contact _____

Telephone _____

Figure 11-1 PCB Label (40 CFR 761.45)

PCB REQUEST EXAMPLE

Date

Power Company Name
Address
City, State Zip

SUBJECT: Identification of Polychlorinated Biphenyl (PCB) Containing Transformers

To Whom It May Concern,

In accordance with 40 CFR 761.30 (1) (vii), as of December 1, 1985, PCB transformer owners must register transformers located on or near commercial buildings with the building owner of record. As part of our Environmental Management program, we require the identification of any equipment containing PCBs. *Power Company Name* has been identified as owning *number of transformers on site* transformer(s) at this facility. We request that you determine if any PCB containing transformers are located on the Army Reserve Center at the following location(s):

Facility Name
Facility Address
City, State Zip

We are concerned about both transformers on our property as well as transformers that have the potential to release their contents onto our property. In keeping with this request, if any transformers are identified as PCB containing, then we request you label them as containing PCBs and that this marking be clearly visible to our personnel from ground level. Regardless of the contents of the transformers, we will require a written response that identifies the contents of the dielectric fluid (PCBs, mineral, silicone oil, etc.). If the transformer is PCB containing, then we further request that the transformer(s) be replaced or scheduled for immediate testing.

Please forward this information at your earliest convenience. We appreciate your assistance and cooperation in this matter. Questions and comments may be directed to *your name* *your telephone number*.

Sincerely,

Your Name
Your Title

Figure 11-2

SAMPLE PESTICIDE STATEMENT

AFRC-CAL-*YOU* (200) ** May 1998

MEMORANDUM FOR RECORD

SUBJECT: Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) compliance.

1. This facility has completed a preliminary study to determine its compliance with FIFRA requirements as outlined in U.S. Code (USC) 136-136y.

2. IAW the 81st RSC Pest Management Program, all pest management services are contracted out to qualified vendors. No facility personnel apply, transport or store pesticides and therefore do not require certification as set forth in 40 CFR 171.3.

3. This memorandum serves as a statement of non-applicability to the requirements of FIFRA. This memorandum should be used to avoid negative ECAAR findings as it relates to FIFRA. The point of contact for this action is *Your FAST Environmental Manager and Phone Number*.

John O. Name
CPT, CM, USAR
Facility Commander

Figure 11-3

NOISE COMPLAINT REPORT

Name of Facility _____

Point of Contact _____

Date/Time of Report _____

Person Who First
Received Complaint _____

Source of Noise _____

Source of Noise _____

_____

_____

Name of Complainant _____

Agencies Notified _____

Actions Taken _____
(To prevent a
Reoccurrence) _____
(If none, so state)

_____

_____

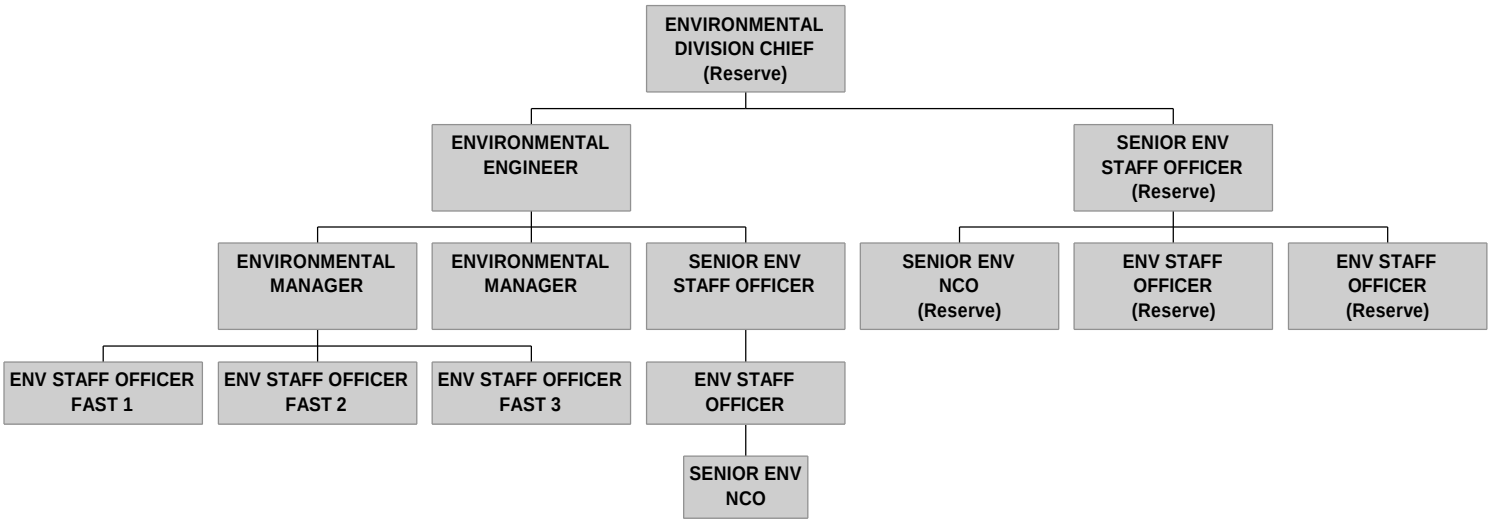
_____ _____

Government Representative (Signature) Date

Figure 11-4

Appendix A

81ST REGIONAL SUPPORT COMMAND
ENVIRONMENTAL DIVISION



2 December 1998

Appendix B

REQUIRED ENVIRONMENTAL COMPLIANCE FILES
MARKS GUIDANCE

200	Environmental Quality Files
	ECAS Reports (Internal and External)
	General Environmental Correspondence (EQCC)
	Quarterly Facility Assessment Checklist
	Appointment Orders
	Historical and Cultural Preservation
	Spill Reports
	Regulatory Inspections / Notices of Violation / Warning Letters
200-1a	Environmental Pollution Abatement Files
	Asbestos
	Asbestos Survey / O&M Plan
	Clean Air Act
	CFC and Halon Report
	Air Emission Inventory
	Noise Pollution
	Noise Complaints
	Radon
200-1c	Hazardous Materials Management Files
	Hazard Communication
	Biannual Hazardous Material/Hazardous Waste Inventory
200-1d	Hazardous Waste Management Files
	Disposal Documentation
	Hazardous Material/Hazardous Waste Monthly Report
	Hazardous Waste Report (as applicable)
	Weekly Hazardous Waste Inspection
	Solid Waste Disposal Contract
420-74c	Endangered Species
	US Fish and Wildlife Coordination
350-37	Environmental Training
	Environmental Documentation for Training Events
	Environmental Certification (HAZWOPER, DOT HM Handling, etc.)

Underline - Only required if applicable

REQUIRED ENVIRONMENTAL COMPLIANCE FILES
MARKS LABEL GUIDANCE

Label	Instructions
37-1f Accounting documents (98) Environmental support-small purchase COFF 30 Sep 98, Dest Oct 00	Copies of 516-E-R, SF 44, IMPAC card statements for environmental purchases
37-1f Accounting documents (98) Environmental support - contracts COFF 30 Sep 98, Dest Oct 00	Copies DD 1155 for environmental purchases for the facility. This includes services for hazardous waste disposal, Safety Kleen or one-time purchases on contracts that are environmentally related.
200 General environmental quality correspondence ACTION Destroy after 2 years	Routine or general requests for information and replies and other information relating to environmental quality, which cannot logically, filed.
200 General environmental quality correspondence NON-ACTION Dest when no longer needed	Matters that are related to environmental quality that are for information only.
200-1a Environmental pollution abatement	Surveys for asbestos and asbestos O&M plans, radon, noise, radon, pollution and CFC.
200-1b Environmental pollution complaints Destroy 10 years after close of case	Complaints on alleged environmental pollution. Letters of complaint NOV, investigations by federal, state, or local regulators, studies and replies to complaints.
200-1c Hazardous material management (HM Inventory) Destroy after 50 years	Semi-annual inventory of hazardous materials and notification to local fire department. Files are maintained on a calendar year basis.
200-1c Hazardous material (98) management (HW reports, manifests) Destroy after 50 years	Monthly Hazardous Waste Report and USARC Form 74-R (Test), Manifest for disposal of HW, OWS pumping, and Safety Kleen. Files are maintained on a calendar year basis.
200-1c Weekly hazardous waste inspections Destroy after 1 year	Copies of facility weekly hazardous waste inspections. A 12-month history will be maintained.
200-1c Hazard Communication MSDS Destroy when no longer needed	A copy of the Material Safety Data Sheet for all hazardous materials stored at the facility. These should be kept in binder.
200-1-15-9 Environmental Compliance Assessment (ECAS) and Internal Compliance Assessment (ICAS) Destroy after next inspection	Inspections conducted by the 416th FETDA, 81st RSC, Installations, and Quarterly Facility Assessment Checklist
350-37a Individual training files ACTIVE Place in inactive upon transfer	Maintain a folder for each full time person. File is to be given to individual upon transfer or reassignment to another location. A copy of their record will be retained in an inactive file for three years after departure

350-37a Individual training files INACTIVE Destroy after 3 years	Training records of full time personnel no longer located at the facility.
420-74c Endangered species	Information of threatened and endangered species located on the installation (if active installation) or on or around the vicinity of the reserve center.

REQUIRED ENVIRONMENTAL COMPLIANCE FILES
REQUIRED BINDERS

Required Publications

AR 200-1
AR 200-2
Commander's Guide to Environment Management
81st RSC Pam 420-1

Environmental Management Plans

81st RSC Facility Environmental Handbook

Attachments (As Applicable)

1 Spill Prevention, Control, and Countermeasure Plan
2 Facility Spill Contingency Plan
    Emergency Planning Coordination
3 Hazardous Waste Management Plan
    Monthly HW Generation Reports
    Biannual Hazardous Material / Hazardous Waste Inventory
    Solid Waste Generation Estimates
4 Hazard Communication Plan
5 Pollution Prevention Plan
6 Storm Water Pollution Prevention Plan
    Storm Water Permit
7 Noise Abatement Plan
    Noise Survey
8 Asbestos Operation and Maintenance (O&M) Plan
    Asbestos Survey
* State Specific Environmental Guidance

Materials Safety Data Sheets and Right-to-Know Information

QUARTERLY HAZARDOUS WASTE GENERATOR REPORT FORM

The proponent agency for this form is DCSENGR; Requirement Control Symbol - RCEN81-001

FACILITY ID (NC000) _____

DATE (QUARTER/YEAR) _____

PART I

Hazardous Waste Generated	Lbs.	Hazardous Waste Generated	Lbs.
Parts Washer Solvent {Recovered by Contractor (Safety Kleen)}		Other Contaminated Solvent (Not recovered by contractor)	
Antifreeze (Unrecycled)		Waste Oil (Contaminated Oil - Used oil is not normally hazardous waste)	
Oily Rags (Unless laundered)		Rifle Bore Cleaner / Rifle Cleaning Rags Rifle Bore Patches	
Wet Batteries (Unrecycled) Dry Batteries (Unrecycled)		Waste / Contaminated / Obsolete Paint Expired Shelf Life Paint	
Contaminated Absorbent Contaminated Spill Supplies		Petroleum Contaminated Soil	
Chemical Defense Equipment (Expired Shelf Life)		Other (Describe)	
Total			

8 LB = 1 Gal 1 Cubic yard of Soil = 2,000 lbs. 32 Aluminum Cans (empty) = 1 LB

PART II

QUARTERLY RECYCLING REPORT			
Recycling Collected	**Lbs.**	**Recycling Collected**	**Lbs.**
White Paper (Recycled) Newspaper / Other Paper (Recycled)		Cardboard (Recycled)	
Antifreeze (Recycled On or Off-Site)		Used Oil (Recycled On or Off-Site)	
Parts Washer Solvent (Recycled On Site Only)		Other Solvent (Recycled On Site Only)	
Wet Batteries (Recycled) Dry Batteries (Recycled)		Lightbulbs (Recycled) Ballasts (Recycled)	
Aluminum Cans (Recycled)		Other (List)	
Total			

Note: Recycled means sent to the recycling center or picked up by the local recycling program.
81ST RSC FORM 5-R, JAN 9

APPENDIX C-1

HAZARDOUS MATERIAL/WASTE STORAGE AREA CHECKLIST

Facility / Unit: _____ / _____

Building: _____ Date: _____ Time: _____

Name of Inspector: _____

Containers:	Yes	No	N/A
1. Are containers free from leaks, spills & damage? (not leaking, rusting, corroded or bulging)			
2. Are containers closed and under cover?			
3. Do HM/HW containers have secondary containment?			
4. Is material/waste compatible with the type of container?			
5. Do filled containers have 4 inches of airspace?			
6. Are containers properly labeled and marked with: Hazardous Material/Waste label. Hazard class label or characteristic? Common name of material/waste?			
7. Are hazardous waste labels filled out with: Proper shipping name & UN/NA number. Accumulation start date. Generators address. EPA ID number.			
8. Are all HW containers within the facility's accumulation time limit? (180 days for SQG)			

Storage Area:	Yes	No	N/A
1. Is the Storage Area generally free of debris and litter?			
2. Is there adequate storage for the storage of HM/HW on-hand?			
3. Is the Storage area secured and protected against tampering and trespassing?			
4. Is berm and flooring in good enough condition to contain spills?			
5. Are spill clean-up supplies available?			
6. Are incompatible materials/wastes separated by a physical barrier (wall, dike, or berm)?			
7. Are different waste streams stored in different areas?			
8. Are opened Hazardous Material containers emptied before opening other new containers?			
9. No leaks, spills, or fumes detected.			
10. Are signs posted for Emergency POCs?			
11. Is the fire extinguisher(s) available and sufficiently charged?			
12. Are signs posted stating "Hazardous Material/Waste / No Smoking within 50 feet"?			

Solid Waste:	Yes	No	N/A
1. Is solid waste dumpster secure?			
2. Does dumpster have a cover?			
3. Is the dumpster adequate size? No overflow?			
4. Is dumpster marked, "NO HAZARDOUS WASTE, SOLID WASTE ONLY"?			

To be filled out weekly and maintained on site for 1 year after the date of inspection.

HAZARDOUS MATERIAL / HAZARDOUS WASTE INVENTORY

THE PROPONENT AGENCY FOR THIS FORM IS DCSENGR; REQUIREMENT CONTROL SYMBOL – RCEN81-002

FAC ID (NC099) _____DATE_____

LOCATION (ONSITE) _____ UNIT / ACTIVITY _____

DESCRIPTION	NSN / CAS / BRAND NAME	QUANTITY	GAL / LBS.	TOTAL

Location on site is the storage area at the facility where the item(s) is stored. This storage area should appear on an attached site map.
If no NSN or CAS Number is available, and then a description should include the brand name, address of the manufacturer, and color, etc.
Quantity - number of containers on hand. Gal / Lbs. - size/volume/weight of the container. Total - product of Quantity & Gal / Lbs. (Quantity x Gal / Lbs.).

81st RSC Form 6-R, Jan 98

EPCRA 313 1998 TOXIC
(See 2)

CHEMICAL Contact Person: _____ Phone No._____
[See 3]
RELEASE Building No_____
INVENTORY The proponent agency for this form is DCSENGR; Requirement Control Symbol - RCEN81-003

Product Number (See 4)	Product Name	NSN # (See 5)	Building where product is used (LB/gal) (See 6)	Total Quantity Used for 1998 (LB/gal) (See 6)	Product Use (See 7)

Notes:
1. Enter the Facility name (for example: Huntsville USARC/AMSA #14).
2. Enter the Facility Identification Number (for example: AL028)
3. In the second blank, enter the total number of forms used. In the first blank, enter the number of this form.
4. Enter a number for each product.
5. Enter the National Stock Number (NSN) if known. If you have no NSN, please attach a Material Safety Data Sheet to this form.
6. Estimate the total quantity of the product used for the whole year of 1997. This information can be obtained by looking at procurement records and determining how much you purchased minus what you had in stock at the end of the 1997 calendar year. Please report in pounds, gallons or other units of measurement that can be converted to pounds or gallons. Such units of measurement will be pints or ounces. Items such as cans, tubes, sticks and buckets are not acceptable units of measurement.
7. Describe how the product is used. For example, there are many different ways to use paint so you need to specify what it is you painted and for what purpose.

81st RSC Form 7-R, Jan 98

LABELING AND PLACARDING

Category of material (Hazard class or Division Number)	Placard name	Placard Design section reference (§)
1.1	EXPLOSIVES 1.1	172.522
1.2	EXPLOSIVES 1.2	172.522
1.3	EXPLOSIVES 1.3	172.522
1.4	EXPLOSIVES 1.4	172.523
1.5	EXPLOSIVES 1.5	172.524
1.6	EXPLOSIVES 1.6	172.525
2.1	FLAMMABLE GAS	172.532
2.2	NON-FLAMMABLE GAS	172.528
2.3	POISON GAS	172.540
3	FLAMMABLE	172.532
Combustible Liquid	COMBUSTIBLE	172.544
4.1	FLAMMABLE SOLID	172.546
4.2	SPONTANEOUSLY COMBUSTIBLE	172.547
4.3	DANGEROUS WHEN WET	172.548
5.1	OXIDIZER	172.550
5.2	ORGANIC PEROXIDE	172.552
6.1 (PG I, inhalation hazard only)	POISON	172.554
6.1 (PG I or II, other than inhalation hazard)	POISON	172.554
6.1 (PG II)	KEEP AWAY FROM FOOD	172.553
6.2	(None)	
7 (Radioactive Label).	RADIOACTIVE[1]	172.556
8	CORROSIVE	172.558
9	CLASS 9	172.560
ORM - D	(None)	

[1]RADIOACTIVE placard also required for exclusive use shipments of low specific activity material and surface contaminated objects transported in accordance with §173.427(b)(3) or (c) of this subchapter.

ENVIRONMENTAL EQUIPMENT
NATIONAL STOCK NUMBERS

Nomenclature	NSN
Absorbent (Clay)	7930-00-269-1272
Absorbent (Safestep)	7930-00-145-5797
Absorbent (Vermiculite Insulation)	5640-00-801-4176
Bungwrench, non-sparking	5120-00-244-4389
Can, Screwcap	8110-00-574-9641
Cap, Threaded (2.5 inch for 55 gal drum)	8110-00-286-2527
Cap, Threaded (0.75 inch for 55 gal drum)	8110-00-286-2631
Drain Pan	4910-00-387-9592
Drum, Bung Type (Screwcap - 55 gal drum)	8110-00-292-9783
Drum, Removable Lid (1.5 gal drum)	8110-00-951-3570
Drum, Removable Lid (3 gal drum)	8110-00-431-8670
Drum, Removable Lid (4 gal drum)	8110-00-254-5722
Drum, Removable Lid (6 gal drum)	8110-00-254-5713
Drum, Removable Lid (7 gal drum)	8110-00-254-5714
Drum, Removable Lid (9 gal drum)	8110-00-254-5715
Drum, Removable Lid (12 gal drum)	8110-00-254-5716
Drum, Removable Lid (16 gal drum)	8110-00-254-5717
Drum, Removable Lid (20 gal drum)	8110-00-146-1588
Drum, Removable Lid (30 gal drum)	8110-00-866-1728
Drum, Metal 30 gal	8110-00-030-7779
Drum, Removable Lid (55 gal drum)	8110-00-082-2626
Drum, 55 gal, with band	8140-01-054-6702
Drum, 55 gal	8110-00-823-8121
Drum, Polyethylene, Non-removable Head Reusable (55 gal)	8110-00-150-0677
Drum, Removable Lid (85 gal drum)	8110-00-118-5765
Drum, Disposal, Unlined (85 gal drum)	8110-01-101-4055
Drum, Recovery, Phenolic Lined (85 gal drum)	8110-01-101-4056
Label, Adhesive Flammable Liquid	7540-01-054-7241
Label, Adhesive Flammable Solid	7540-01-054-7242
Label, Adhesive Oxidizer	7540-01-054-7243
Label, Adhesive Poison	7540-01-054-5091
Label, Adhesive Corrosive	7540-01-054-7251
Label, Adhesive Empty	7540-01-054-7252
Label, Adhesive Dangerous When Wet	7540-01-054-7253
Paint Pens, Lacquer, Dozen, White	7520-01-207-4139
Paint Pens, Lacquer, Dozen, Yellow	7520-01-207-4165
Placards Flammable	7540-01-028-5129
Placards Combustible	7540-01-028-5130
Placards Flammable Solid	7540-01-028-5131
Placards Oxidizer	7540-01-028-5132
Placards Poison	7540-01-028-5134
Placards Corrosive	7540-01-028-5136
Plastic Bag 55 gal - 35” x 58”	8105-01-183-9764
Plastic Bag 30 gal - 33” x 39”	8105-01-183-9769
Plastic Bag 7 gal - 24” x 23”	8105-01-183-8730
Plastic Sheeting	8135-01-579-6489
Shovel, Hand, Square Point, Long Handle	5120-00-293-3330
Spill Kit	8110-01-302-4252

Appendix F

TRAINING IMPLEMENTATION PLAN

a. **Purpose.** The purpose of this Training Implementation Plan is to outline a format for environmental hazardous awareness training. There are two categories of training initial and sustainment. Personnel are divided into six groups. The training requirement for each group varies and the requirements are listed below.

1. AMSA, ECS, and ASF Foreman.
2. OMS Supervisors.
3. All other maintenance personnel.
4. Facility Environmental Compliance Officer and Facility Environmental Coordinator.
5. Unit Environmental Compliance Officer and Unit Environmental Coordinator.
6. All other reservists.

b. **Requirements.** Initial and Sustainment Training Requirements.

1. Group one personnel will complete one 24-hour course with the FAST, then an additional 8-hours sustainment training each year with the FAST or through one of several approved sustainment-training methods.

2. Group two initial and sustainment training will be conducted by office of the 81st RSC.
3. Group three initial and sustainment training will be conducted by Group one and two personnel.

4. Group four personnel will be required to obtain initial training within six months of assuming the duties of their new assignment, and then sustainment training will be conducted once each year through an approved training method.

5. Group five personnel initial and sustainment training will be conducted by Group four.
6. Group six personnel initial and sustainment training will be conducted by Group five.

c. **Documentation of Training**.

1. Documents. The Environmental Training Record will be used to document individual training and briefings. The following items will be used to verify training and as support documentation: Certificates of Completion, sign-in sheets or as completed DD for 1556-1.

2. Record Maintenance. A record of the individuals training will be maintained in a personnel-training file by the unit Training Officer/NCO. Facilities will also keep and Environmental Training File. This can be one file that reflects the training of essential personnel in the facility.

TRAINING MANAGEMENT

Tasks, Conditions, and Standards for
Environmental Training

1. The purpose of this outline is to establish the criteria, i.e., the Tasks, Conditions, and Standards which will be used to format lesson plans for Environmental Safety Training.

2. Each training area will have listed an Enabling Learning Objective, followed by the Task, Conditions and Standards for that particular objective.

24 Hour Hazardous Materials Technician Training.

ENABLING LEARNING OBJECTIVES

TASK: Implement a response plan, use test equipment, select PPE, demonstrate working knowledge of toxicology and chemical terminology, as well as risk assessment and prevention.

CONDITION: Given appropriate manuals and reference material.

STANDARD: Successfully completes a written and/or hands-on examination demonstrating knowledge of learning objectives.

8 Hour First Responder Operations Level Training.

ENABLING LEARNING OBJECTIVES

TASK: Define risk assessment and Hazmat terms, demonstrate basic PPE knowledge, be able to secure an area to prevent further exposure, and know basic decon procedures.

CONDITION: Given a classroom setting and appropriate manuals and reference materials.

STANDARD: Successfully completes a written and/or hands-on examination demonstrating knowledge of learning objectives.

16 Hour Environmental Awareness Training.

ENABLING LEARNING OBJECTIVES

TASK: Demonstrate knowledge of hazardous waste/material storage, handling, labeling, disposal, manifesting and safety. Demonstrate a working knowledge of environmental issues concerning washracks and oil water separators. Demonstrate a general understanding of the Army Environmental Program.

CONDITION: Given a classroom setting and appropriate manuals and reference materials.

STANDARD: Successfully completes a written examination demonstrating a general knowledge of the Army Environmental Program.

Tasks, Conditions, and Standards for
Environmental Training

8 Hour Environmental Awareness Training

ENABLING LEARNING OBJECTIVES

TASK: Demonstrate a very general overall knowledge of the Army Environmental Program, and First Responder Operations Level Training.

CONDITION: Given a classroom setting and appropriate classroom notes and manuals.

STANDARD: Successfully completes a written examination demonstrating a general knowledge of the Army Environmental Program and the First Responder Operations Level Training.

Environmental Awareness Briefing

ENABLING LEARNING OBJECTIVES

TASK: Demonstrate a very general overall understanding of environmental issues. Demonstrate knowledge of the point of contact to report spills to. Have an overall understanding of Hazardous Communications, Pollution Control, and recycling procedures.

CONDITION: Given a classroom or auditorium setting and appropriate briefing notes.

STANDARD: Orally demonstrates knowledge and understanding of the Army Environmental Program.

Unit _____ Location _____

Checklist of Actions Before Training

General	**Yes**	**No**	**NA**
Are environmental considerations part of training conditions and standards?			
Are leaders including the "environmental considerations," in the long-, short-, and near-term planning?			
Are forested weather considerations included in planning training?			
Are alternative missions planned?			

Area of Operation

Has range clearance been obtained?			
Have special land-use permits been obtained?			
Are areas of environmental concern verified during site reconnaissance?			
Are leaders reviewing previous environmental issues and problems that are applicable to the operations/training about to be conducted to identify lessons learned and plan preventive measures.			

Personal Preparation

Do soldiers understand their responsibilities in reducing generation of HW and minimizing damage to the environment?			
Have all soldiers been briefed on range restrictions, endangered species, and the appropriate use of vegetation for camouflage, archeological sites, and other sensitive environmental resources?			
Are identified environmental risks discussed in unit training meetings?			
Are transporters of HM trained according to DOT HM 181 and 126F.			

Operations Preparation

Has an environmental risk-assessment been performed?			
Are rehearsals conducted to ensure that all safety and environmental considerations are satisfied?			
Has the unit's ENVIRONMENTAL HANDBOOK been reviewed for procedures concerning environmental protections?			
When the unit transports hazardous materials (explosives, and petroleum, oil, and lubricants (POL), are the materials checked to ensure that they are properly labeled and that a MSDS is present for each substance?			
Are provisions made for handling medical wastes (if applicable)?			
Are provisions made for handling human and solid wastes?			
Are needed tools, equipment, and materials available to respond to environmental emergencies?			
Are personnel designated for spill-response teams(s) properly trained and aware of their assignment?			
Are team members aware of the procedures for requesting additional spill assistance if required?			
Has all training received by the spill-response team(s) been conducted and placed on file in the unit?			

Chain of Command

Have the battalion commander and the S3 been briefed on the training plan?			

Checklist of Actions During Training

General	**Yes**	**No**	**NA**
Are all unit personnel knowledgeable of "Off Limits" areas?			
Do you have approval for fighting positions, tank ditches, and so forth?			
Are range conditions and restrictions known?			
Is downtime used for conducting hip-pocket training on environmental concerns?			
Are leaders monitoring high-risk operations and activities?			

Noise Reduction

Are leaders explaining about and marking hazardous-noise areas?			
Are units avoiding unnecessary noise by not revving engines?			
Are units complying with community/installation noise abatement hours?			
Are vehicles avoiding unnecessary noise by obeying speed limits?			

Minimizing Vehicle-Movement Damage

Are soldiers driving vehicles on secondary roads and bypasses whenever possible to minimize on-road damage?			
Are soldiers moving vehicles into bivouac or assembly areas in columns?			
Are soldiers designated to remove mud and debris immediately from roadways?			
When soldiers drive off road, do they stay on marked trails and routes, thus minimizing cross-country movement?			
Do soldiers cross-streams and ditches only at approved crossings?			

Wetlands (marshes, swamps, bogs)

Is special permit obtained (if required) to train in the wetland areas?			
Are sensitive and "off-limits" areas designated and well marked?			
If possible, is the use of vehicles and other destructive activities avoided?			
Are soldiers using designated bridges and crossings sites, when driving?			
Are units avoiding discharging wastewater into wetlands and waterways?			
Are units prohibiting refueling or field-maintenance operations near or in wetlands or surface waters?			
Are units avoiding filling any wetland areas?			

Threatened/Endangered Species and Other Protected Wildlife/Vegetation/Habitat

Are soldiers exercising due care in not disturbing/destroying threatened/endangered species, habitats, and sensitive areas?			
Are sensitive areas marked off?			

Cultural Resources

Are units avoiding digging in or near these sites or structures?			
Are soldiers instructed to not modify or destroy these sites in any way?			
Do soldiers understand that the destruction or defacing of archeological sites is a violation of the law?			
Are soldiers instructed to report immediately the discovery of any artifacts and wait for clearance to resume training?			

Checklist of Actions During Training

Camouflage	Yes	No	NA
Are units exercising care that ground cover is not stripped bare of vegetation?			
Are units using camouflage nets, whenever possible, instead of live vegetation?			
Are field-kitchen wastes being disposed only as authorized?			

Waste Disposal

Is each unit policing its training area?			
Are units establishing designated collection points for proper trash disposal?			
Are field-kitchen wastes being disposed only as authorized?			
Are medical and human wastes being disposed of in an approved manner?			
Are units following local policies and procedures (outlined in Field Manual FM 21-10) when disposing of liquid waste from kitchens, showers, and baths?			

Hazardous Material and Waste Handling

Are units complying with the installation environmental management office (EMO) procedures for the turn in and disposal of hazardous waste?			
Are units obtaining approval before using riot-control chemical agent (CS) and smoke?			
Are unexploded munitions being properly marked and reported?			
Are units minimizing the use of hazardous chemicals?			
Are units placing hazardous waste and POL waste products in separate containers?			
Are units delivering hazardous waste and POL waste products to a designated waste-collection point?			
Are units ensuring that POL and vehicle maintenance waste products are not dumped into sewers, ditches, or streams?			
Are spill teams designated and trained?			
Are needed spill-response equipment and material available?			
Are spill teams responding immediately to reported spill locations?			
Are spill teams trained on fire/explosion procedures?			
Are spill teams trained in emergency first aid?			
Are spills reported as required by local regulations and unit ENVIRONMENTAL HANDBOOK?			

Refueling and Maintenance

Are vehicles refueling only at designated sites?			
Are soldiers protecting ground surfaces, using POL drip pans?			
Are units ensuring that POL-absorbing compounds are present during operations?			
Are units avoiding the performance of field services and maintenance activities near wetlands, streams, or other bodies of water?			

Checklist of Actions After Training

Home Station	Yes	No	N/A
Are units avoiding washing vehicles in natural bodies of water and using only desig vehicle wash facilities and equipment?			
Are fighting positions, gun emplacements, and other holes being properly refilled?			
Are communications and barrier wires being collected?			
Are all wastes (litter, ammo, brass, and so forth) being properly policed and remove			
Are unexploded munitions being properly marked and reported?			
Are hazardous spills being reported and cleaned up?			
Are leaders inspecting the range and training areas before obtaining?			
During assessment of soldiers' proficiency has it been noted how well they understo followed environmental requirements?			
Are environmental concerns addressed in the unit's evaluation report and included			

Print and sign name

Unit Environmental Compliance Officer, Rank Date

Approved/Disapproved

Unit Commander, Rank Date

Disposition Instructions: A copy of this checklist is to be forwarded to the unit's next higher headquarters for battalion size units and lower.

Appendix H

FACILITY INSPECTION FORM

FACILITY ID (AL000) _____

INSPECTION DATE _____

Facility Name		**FACILITY TYPE**	
Address			ECS
City			AMSA
State			ASF
Zip Code			USARC with OMS
Facility Manager			USARC (No OMS)
Telephone			Other (Specify)
Leased or Owned		Note:	
FAST			

REQUIRED RECORDS

Yes, No, or N/A

Record of Indoor Firing Range Testing		Pesticide Statement	
Record of Indoor Firing Range Closure		OWS Maintenance Documented (Log)	
HW Management Plan		Weekly HW Storage Area Inspected	
HW Minimization Plan		Quarterly HW Generator Report on File	
Storm Water Pollution Prevention Plan		PCB Letter from Public Utility	
AR 200-1 On File		ICUZ Statement On File	
AR 200-2 On File		Air Emissions Statement On File	
81st RSC ENVIRONMENTAL HANDBOOK On File		Appointment Orders On File	
Site Specific Spill Plan		Conducted Semiannual HM/HW Inventory	
Asbestos Survey and O&M Plan		Annual CFC-Halon Report / Inventory	
Asbestos Survey On File		HW Manifests On File	
Spill Record		HW Manifests Filed Chronologically	
Radon Test Results On File		HW Invoices (Safety Kleen)	
Environmental Training Documented / Filed		Other	

Record Comments: _____

_____

_____

_____

FACILITY INSPECTION FORM

HAZARDOUS MATERIALS (HM)

Yes, No, or N/A

Sufficient Ventilation for Safe Storage of HM		MSDSs Readily Available on all HMs	
Haz Mat Emergency Signs Available		HM/HW Inventory Filed with Fire Department	
HM Covered and Off of the Ground		HM/HW Containers Stored Separately	
HM/HW Containers Grounded Properly		HM Containers Labeled Properly	
No Excess HM On Site		HM Storage Area Away from Drain	
HM Stored Properly		HM Containers in Good Condition	

HM Comments: _____

_____

_____

HAZARDOUS WASTE (HW)

Yes, No, or N/A

Incompatible Wastes Separated		Waste Streams Compatible	
HW Storage Area Inspected Weekly		HW Containers Labeled Properly	
Dumpster Marked "No HW Solid Waste Only"		POL Containers Covered / Contained	
Containers Free from Leaks / Spills		Used Oil Container(s) Labeled	
HW Stored Properly		HW Disposed of Properly	
Type of Used Oil Container		Type of HW Storage Building	

HW Comments: _____

_____

_____

_____

INDOOR FIRING RANGE

Firing Range Closure or Conversion Date			**FIRING RANGE STATUS**
Current Usage (i.e. Classroom or Storage)			Open Active
Comments:		Permanently Clean Closed	
		Permanently Closed (Dirty)	
		Closed / Converted	

FACILITY INSPECTION FORM
(WASHRACKS, POLLUTION PREVENTION, TRAINING, ETC.)

FACILITY ID (NC000) _____

POLLUTION PREVENTION

Yes, No, or N/A

Antifreeze Recycled On or Off-Site		Batteries Recycled On or Off-Site	
Used Oil Recycled On or Off-Site		Sufficient Spill Response Equipment	
Recycling Documented (Quarterly Report)		Spill Procedures Posted	
Paper and Aluminum Cans Recycled		Emergency POCs Posted	
No Distressed Vegetation / Discolored Soil		No Contaminated Soil or Groundwater	
Drip Pans Used to Contain Leaks		Vehicles Checked Daily for Leaks	

P2 Comments: _____

_____

_____

WASHRACK STATUS

X Appropriate Status

WASHRACK STATUS		OWS STATUS		RECIRC SYSTEM STATUS	
Open		Operational		Operational	
Replaced (Open)		Needs Upgrade		Inoperative	
Renovated (Open)		Needs Replacement		Not Applicable	
Needs Upgrade		Inoperative			
Closed		Not Applicable			
Not Applicable					

Date Washrack Constructed	
Date O/W S Inspected	

Yes, No, or N/A

Washrack Area Free of Visible Oil / Grease		Concrete Pad Free of Cracking	
OWS Pumped Annually		Washrack Covered Completely	
Proper Berming on All Sides		Sandtrap Cleaned Periodically	
Soil Around Washrack Unstained		NPDES Permit Required	

Washrack Comments: _____

_____

_____

_____

FACILITY INSPECTION FORM

PERMITS

X Appropriate Category; fill-in as Applicable

STORM WATER (SW) PERMITTING REQUIREMENTS			HW PERMITTING REQUIREMENTS		
	Permit Required			Conditionally Exempt Small Quantity	
	Permit Not Required			Small Quantity	
				Large Quantity	
Storm Water Permit #			EPA ID Number		
Date SW Permit Issued			Date HW Permit Issued		
Type of SW Permit			Type of HW Permit		

Permit Comments: _____

_____

TRAINING REQUIREMENTS

Yes, No, or N/A

Written HAZCOM Program		HAZWOPER (AMSA/ECS/OMS Personnel)	
Annual HAZCOM for all Personnel		Annual HAZWOPER Refresher Training	
Annual Awareness Training for all Personnel		HW Handling (AMSA/ECS/OMS)	

Training Comments: _____

_____

TANK MANAGEMENT

Number of Applicable Tanks

Aboveground Storage Tanks (ASTs)		Underground Storage Tanks (USTs)	
ASTs > 660 Gal		Active USTs	
Tank (AST) Use(s):		Regulated USTs	
		USTs Meeting 1998 Standards	

ASBESTOS MANAGEMENT

Answer As Applicable; Yes, No, or N/A

Asbestos Survey Date		Friable ACM Present	
Asbestos Containing Material (ACM) Present		No Additional Friable ACM Identified	
Location(s) of ACM		Location(s) of Friable ACM	

This Form corresponds to a 81st RSC MS Access Database that tracks facility environmental conditions.

GENERAL ENVIRONMENTAL INFORMATION

FACILITY ID (NC000) _____

Facility Name		**FACILITY TYPE**	
Address			ECS
City			AMSA
State			ASF
Zip Code			OMS w/ USARC
Telephone			USARC (No OMS)
Facsimile			Other (Specify)
Facility Manager		Note:	
Shop Foreman			
Environmental Coordinator			
FAST Environmental Manager			

FACILITY INFORMATION

Number of full-time Personnel		Connected to City Water	
Total Number of Reservists		Connected to City Sewer System	
Number of Vehicles On Site		Date of Construction (Year)	
Number of HW Storage Buildings		Type(s) of HW Storage Building	
Describe Adjacent Property (N)		Describe Adjacent Property (E)	
Describe Adjacent Property (S)		Describe Adjacent Property (W)	

UNIT INFORMATION

Type(s) of Units in Facility	
Primary Training Activities On Site	
Primary Training Site (Installation)	
Training Conducted Off Site	

This Form corresponds to a 81st RSC MS Access Database that tracks facility information.

Appendix I

Facility Spill Contingency Plan

I. PURPOSE:

FACILITY SPILL CONTINGENCY PLANS (FSCP) ARE REQUIRED FROM ALL ARMY FACILITIES AND ACTIVITIES THAT STORE, HANDLE, OR TRANSFER OIL OR HAZARDOUS SUBSTANCES, FOR WHICH THERE IS A REASONABLE POSSIBILITY OF A SPILL OR RELEASE INTO THE ENVIRONMENT OF A REPORTABLE QUANTITY OF PRODUCT. THE ORIGIN OF THE REQUIREMENT IS THE NATIONAL CONTINGENCY PLAN (40 CFR 300.105), WHICH STATES THAT FEDERAL AGENCIES SHOULD MAKE PLANS FOR EMERGENCY RESPONSE TO SPILLS OF OIL, HAZARDOUS SUBSTANCES AND POLLUTANTS/CONTAMINANTS FOR WHICH THEY ARE RESPONSIBLE.

II. GENERAL INFORMATION:

Spills should only be cleaned and contained by personnel who have been trained to conduct such operations. If danger of exposure exists stay clear of spilled material and contact local emergency response personnel (911).

III. ASSIGNMENT OF SPILL/ENVIRONMENTAL COORDINATOR:

An Environmental Coordinator must be designated in writing at each facility that stores hazardous material or waste. The Environmental Coordinator will serve as On Scene Coordinator in the event of a spill.

IV. DUTIES OF PERSONNEL:

a. Spill Coordinator: The Spill Coordinator is required to 1) ensure that all spills are cleaned up appropriately, 2) notify proper state, federal, and local agencies, 3) ensure that a Spill Report Form is filled out and sent to the 81st RSC Environmental office, and 4) coordinate all aspects of the project to ensure a safe and successful completion. ***The Spill Coordinator MUST be notified of every spill at the facility.***

b. Maintenance Personnel: General Maintenance Personnel are responsible for 1) initial containment to prevent flow to any ditch or water source, 2) securing source if possible, 3) contacting Spill Coordinator, 4) contacting 911 if spill is beyond control, and 5) use spill equipment to cleanup minor POL spills.

V. REQUIRED TRAINING OF PERSONNEL:

a. Spill Coordinator: Hazard Communication and 24 HAZWOPER

b. Facility Personnel: Hazard Communication and First Responder (8 hour)

VI. SPILL EQUIPMENT:

ALL FACILITIES THAT STORE HAZARDOUS MATERIALS OR WASTE MUST HAVE A SPILL KIT ON SITE THAT INCLUDES 1) SORBENT PADS, 2) NEOPRENE GLOVES, 3) SORBENT BOOM, AND 4) OIL DRY.

VII. EMERGENCY RESPONSE:

a. Stop Flow and Contain Spill:

1) If spilled material is POL, proceed with cleanup, if other chemicals contact emergency officials at 911.
2) Check MSDS to determine hazards associated with material (Refer to chapter 3 and 4).
3) Respond appropriately based on MSDS (Refer to chapter 3 and 4).
4) Ensure personnel use Proper Protective equipment (i.e. Gloves, boots and aprons).
5) Contain spill using sorbent boom, pads, dike, etc. to prevent flow to drains and ditches.

b. Report Spill

1) Contact 911 immediately if the spill is beyond your control.
2) Contact Facility Spill Coordinator or Alternate:

Primary: _____ **Phone:** _____

Alternate: _____ Phone: _____

3) Contact Facility On Scene Coordinator:

DAC, Jim Swift 334-255-5926/2541

4) Contact 81st RSC Environmental as follows:

Dan George	**615-885-8766 (w)**	**Dave Walker**	**205-940-3542 (w)**
Jim Adair	**803-751-6757 (w)**		**205-664-1639 (h)**
Leigh Banks	**404-286-6332 (w)**	**Steve Francis**	**205-940-3541 (w)**
		SFC Bates	**205-940-3545 (w)**
		CPT McCormick	**205-940-3545 (w)**

c. Clean contaminated area.

d. Ensure waste is properly disposed (coordinate disposal w/ RSC).

e. Complete and submit Spill Report Form to RSC (See Figure 5-2).

APPENDIX J

Tanker Spill Contingency Plan

1. Each tanker operator and their supervisor must review this plan and sign the attached letter (See Appendix H-1) stating that they have read it and understand their responsibilities.

2. A copy of the plan MUST be placed in the dispatch book and be kept with the vehicle during operations. In addition, a copy must be kept at the facility where the vehicle is permanently stationed.

3. **Spill Prevention Plan**

a. The operator will inspect the tanker for leaks during daily PMCS
b. If leaks are identified, the operator will cleanup contaminated material and places containment pans under leak
c. Before conducting transfer operation, the operator will verify he/she has sufficient spill equipment to handle minor spills and a fire extinguisher
d. During transfer procedures, the operator should place a 5-gallon bucket under each connection.
e. Driver will stay with the vehicle at ALL times during transfers
f. Smoking is prohibited during transfers
g. Operators will check valves each time the tanker is loaded or off loaded to ensure no valves are left open
h. Operators will take special care while connecting and disconnecting hoses to prevent spills
I. Headlights will be on at all times
j. Placards will be properly displayed on the tankers.
k. Operators will observe safety precautions at all times

4. **Safety Precautions During Transfers and Spills**:

a. Keep unnecessary people away; isolate hazard area and deny entry
b. Stay upwind and uphill of spill
c. NO SMOKING!
d. Use proper personal protective equipment

5. **Emergency Spill Procedures:**

a. In case of spill, **PULL OVER AND STOP ENGINE**
b. Put on personnel protective equipment (i.e. gloves, boots, etc.)
c. Attempt to **STOP FLOW** using rags, plugs, etc.
d. Attempt to **CONTAIN THE SPILL** using sorbent pads, boom, dikes, oil dry, etc. to prevent flow of spilled material to drains and ditches
e. If large spill, greater than 25 gallons, CALL **911 IMMEDIATELY** for assistance then contact 81st RSC and DPW (if on installation) at the numbers listed below
f. For medium size spills (5 gallons to 25 gallons), contact the following personnel

81st RSC, Environmental Division	205-940-3542 (weekdays) 800-868-0495 (nights/weekends)
Supervisor_____	_____(day)
_____	_____(nights/weekends)
Convoy Commander_____	_____(day)
_____	_____(night/weekend)

DPW_____ _____(day)
_____(night/weekend)

(Note: if unable to reach any of the above personnel contact your State Environmental Division at the number below)

_____ _____(day)
_____(night/weekend)

g. **ENSURE SPILL IS PROPERLY CLEANED AND DISPOSED**
h. If assistance is required, contact the 81st RSC Environmental Division (205) 940-3542 or (205) 940-3541
i. If spill is large or medium, a Spill Report Form (Appendix H-2) must be completed and faxed to the 81st RSC at (205) 290-4092

I_____have read the 81st RSC Tanker Spill Contingency Plan
print name
In addition, understand my role and responsibilities in the event an incident occurs.

_____ _____
signature **date**

SPILL REPORT FORM

DATE AND TIME OF SPILL: _____

NAME OF PERSON MAKING REPORT _____

TELEPHONE NUMBER: _____

NAME OF FACILITY: _____

LOCATION OF FACILITY: _____

_____

_____

MAILING ADDRESS OF FACILITY: _____

_____

LOCATION OF SPILL: _____

_____

NEAREST BODY OF WATER: _____

_____

CAUSE AND SOURCE OF INCIDENT: _____

_____

INJURIES OR PROPERTY DAMAGE: _____

PRODUCT, QUANTITY AND DURATION OF DISCHARGE: _____

_____

ACTION TAKEN AND/OR PLANNED: _____

_____

_____

Environmental Manager:_____ **Date:**_____
signature

Environmental Coordinator:_____ **Date:**_____
signature

(FAX ONE COPY TO 81st RSC, FILE ONE COPY AT CENTER)

Glossary of Acronyms and Definitions

ASF
Aviation Support Facility

ASMA
Area Maintenance Support Activity

AST
above ground storage tank

DOD
Department of Defense

DRMO
Defense Reutilization and Marketing Office

ECO
Environmental Compliance Officer

ECS
Equipment Concentration Site

EPA
Environmental Protection Agency

EPCRA
Emergency Planning and Community Right-to-Know Act

EQCC
Environmental Quality Control Committee

ERB
Environmental Records Binder

HAZCOM
Hazard Communication

HAZWOPER
Hazardous Material/Waste Operator Training

HM
Hazardous Material

HW
Hazardous Waste

MSDS
Material Safety Data Sheet

NEPA
National Environmental Policy Act

NSN
National Stock Number

ODC / ODS
ozone-depleting chemical / ozone-depleting substance

O&M
operations and maintenance

OMS
Operational Maintenance Shop

OSHA
Occupational Safety and Health Administration

PCB
polychlorinated biphenyl

RSC
81st Regional Support Command

ENVIRONMENTAL HANDBOOK
Environmental Handbook

UST
underground storage tank

Conditionally Exempt Small Quantity Generator
A hazardous waste generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than 100 kg of hazardous waste (or no more than 1 kilogram of acutely hazardous waste) in that month. Additional storage and other limitations apply. Subject to reduced management requirements. Reference 40 CFR 261.5.

Environmental Compliance Officer
Person assigned at a unit to accomplish environmental compliance requirements on behalf of his or her responsible commander, director, or supervisor. In the Army Reserve, designated person also coordinates with supporting Regional Support Command environmental staff for requirement clarification and assistance. The Facility Commander must assume this responsibility and cannot delegate the responsibility to a subordinate.

Environmental Training
Instruction whose primary purpose is to provide measurable competence for doing specific environmental jobs or tasks. Some may be mandated by law or regulation. Commonly taught in a classroom, by such methods as lecture, discussion, or practical n exercise. However, other methods may also be used. Environmental training includes both separate environmental courses and environmental content in non-environmental courses.

EPA Identification Number
The number assigned by EPA to each hazardous waste generator, transporter, and treatment, storage or disposal facility. Reference 40 CFR 260.10; 264.11; 265.11.

Hazard Communication (HazCom)
OSHA law, which mandates that all employees exposed to HM in the workplace, has the right to know the dangers of these HM. The Hazard Communication Standard is the Federal law issued by issued OSHA to reduce the risk of injury/illness to workers from HM/HW found in the work place. The standard requires that workers be informed about HM/HW in their work areas and be trained to work safely with these materials.

Hazardous material (Examples are listed in Chapter 3)
HMs are useful, purposeful chemicals or other substances that are potentially dangerous to human health and safety or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
As defined by Federal Standard, Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities, a hazardous material is any item or chemical which is a "health hazard" or "physical hazard" as defined by OSHA in 29 CFR 1910.1200, to include chemicals which are carcinogens, toxic, reproductive toxins; irritants, corrosives, sensitizers, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucus membranes, chemicals which are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive, or chemicals which in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics.
A Hazardous Material is also defined as any item or chemical which is reportable or potentially reportable or notifiable as inventory under the requirements of the Hazardous Chemical Reporting, or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (EPCRA), which include chemicals with special characteristics which in the opinion of the manufacturer can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Hazardous waste (Examples are listed in Chapter 2)
A HM becomes a HW when it can no longer be used for its intended purpose because it is used, spent, contaminated, beyond its shelf life, etc. A solid waste identified in 40 CFR section 261.3 or applicable foreign law, rule, or regulation (see also solid waste).

Hazardous waste disposal
As defined in 40 CFR section 260.10, disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Hazardous waste storage
As defined in 40 CFR section 260.10, The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

Inspections
Any visit by a regulatory agency, with legal authority, for assessing regulatory compliance.

National Environmental Policy Act (NEPA)
U.S. statute that requires all Federal agencies to consider the potential effects of proposed actions on the human and natural environment.

NPDES permit
A permit issued to a treatment works pursuant to section 402 of the Federal Water Pollution Control Act. A NPDES permit is required for the discharge of pollutants from any point source into waters of the United States.

Ozone Depleting Chemicals (ODCs)
Class I ODCs have a greater ozone-depletion potential than Class II ODCs. Class II ODCs are generally considered safer than Class I ODCs. Class I and Class II are defined in the Clean Air Act Amendments of 1990. (See 40 CFR part 82, Appendix A and B).

Pollution prevention
Source reduction, as defined in the Pollution Prevention Act of 1990, and, any other practice that reduces or eliminates the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources.

Publicly owned treatment works (POTW)
Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a state or municipality.

Radioactive material
Any material or combination of materials that spontaneously emit ionizing radiation.

Recycling
A material is recycled if it is used, reused, or reclaimed. A distinction exists between onsite recycling (that is, where a waste is discharged form a process, but not from the installation, for recycling) and off-site recycling (that is, were the waste is transported e from the generating activity to an off-site recycler).

Small Quantity Generator (SQG)
A hazardous waste generator who generates less than 1000 kg of hazardous waste (or less than one kilogram of acutely hazardous waste) in a calendar month. Subjected to less stringent requirements than a "large quantity generator" for the management of hazardous waste.

Solid Waste
Any discarded material that is solid, semisolid or liquid intended for disposal. Solid waste may be regulated, non-regulated or hazardous.

Tank
Any stationary device, designed to contain an accumulation of used oil (40 CFR 279.1) or hazardous waste (260.10), oil (40 CFR 112 and 40 CFR 280.12) or regulated substance (40 CFR 280.12) which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provides structural support.